

AD-A238 729



ARI Research Note 91-44

The Army Family Research Program: Origin, Purpose, and Accomplishments

D. Bruce Bell and Jacquelyn Scarville

U.S. Army Research Institute

Barbara Quigley

Morehead State University

Personnel Utilization Technical Area

Nora K. Stewart, Chief

Manpower and Personnel Research Laboratory

Zita M. Simutis, Director

April 1991



91-06065



**United States Army
Research Institute for the Behavioral and Social Sciences**

Approved for public release; distribution is unlimited

REPORT DOCUMENTATION PAGE

Form Approved
OMB No. 0704-0188

| | | | | |
|---|---|---|--|---|
| 1a. REPORT SECURITY CLASSIFICATION Unclassified | | | 1b. RESTRICTIVE MARKINGS -- | |
| 2a. SECURITY CLASSIFICATION AUTHORITY -- | | | 3. DISTRIBUTION/AVAILABILITY OF REPORT Approved for public release; distribution is unlimited. | |
| 2b. DECLASSIFICATION/DOWNGRADING SCHEDULE -- | | | | |
| 4. PERFORMING ORGANIZATION REPORT NUMBER(S) ARI Research Note 91-44 | | | 5. MONITORING ORGANIZATION REPORT NUMBER(S) -- | |
| 6a. NAME OF PERFORMING ORGANIZATION U.S. Army Research Institute | 6b. OFFICE SYMBOL (If applicable) PERI-RP | 7a. NAME OF MONITORING ORGANIZATION -- | | |
| 6c. ADDRESS (City, State, and ZIP Code) 5001 Eisenhower Avenue Alexandria, VA 22333-5600 | | 7b. ADDRESS (City, State, and ZIP Code) -- | | |
| 8a. NAME OF FUNDING/SPONSORING ORGANIZATION U.S. Army Research Institute for the Behavioral and Social Sciences | 8b. OFFICE SYMBOL (If applicable) PERI-R | 9. PROCUREMENT INSTRUMENT IDENTIFICATION NUMBER DAAL03-86-D-0001 | | |
| 8c. ADDRESS (City, State, and ZIP Code) 5001 Eisenhower Avenue Alexandria, VA 22333-5600 | | 10. SOURCE OF FUNDING NUMBERS | | |
| | | PROGRAM ELEMENT NO. 63007A | PROJECT NO. 792 | TASK NO. 2302 WORK UNIT ACCESSION NO. H1 |
| 11. TITLE (Include Security Classification) The Army Family Research Program: origin, Purpose, and Accomplishments | | | | |
| 12. PERSONAL AUTHOR(S) Bell, D. Bruce; Scarville, Jacquelyn (ARI); and Quigley, Barbara (Morehead State University) | | | | |
| 13a. TYPE OF REPORT Final | 13b. TIME COVERED FROM 86/11 TO 89/12 | 14. DATE OF REPORT (Year, Month, Day) 1991, April | 15. PAGE COUNT 80 | |
| 16. SUPPLEMENTARY NOTATION -- | | | | |
| 17. COSATI CODES | | | 18. SUBJECT TERMS (Continue on reverse if necessary and identify by block number) | |
| FIELD | GROUP | SUB-GROUP | Retention Adaptation Single soldiers | |
| | | | Readiness Leadership Unit demands | |
| | | | Demographics Family separation | |
| 19. ABSTRACT (Continue on reverse if necessary and identify by block number) | | | | |
| <p>➤ The U.S. Army Research Institute for the Behavioral and Social Sciences Army Family Research Program (AFRP) has provided research support for our sponsor, the U.S. Army Community and Family Support Center (CFSC), and for the Army Chief of Staff's (CSA) Army Family Action Plans since 1986. This report explains the workings of the project and summarizes progress, to date, in meeting the research objective. That objective is to support the AFRP through research products that (1) determine the demographic characteristics of Army families, (2) identify ways to improve family adaptation to Army life, (3) increase the Army sense of community and partnership, (4) increase family support for retention, and (5) identify family factors that impact on individual and unit readiness.</p> <p>In addition, the report provides a complete list of completed products and products projected to be completed by the end of FY91.</p> <p>The report is based on a series of briefings given by Dr. Bell to future garrison commanders in training at the Army's Logistical Management College at Fort Lee, Virginia.</p> <p style="text-align: right;">(Continued)</p> | | | | |
| 20. DISTRIBUTION/AVAILABILITY OF ABSTRACT <input checked="" type="checkbox"/> UNCLASSIFIED/UNLIMITED <input type="checkbox"/> SAME AS RPT <input type="checkbox"/> DTIC USERS | | | 21. ABSTRACT SECURITY CLASSIFICATION Unclassified | |
| 22a. NAME OF RESPONSIBLE INDIVIDUAL D. Bruce Bell | | | 22b. TELEPHONE (Include Area Code) (703) 274-8119 | 22c. OFFICE SYMBOL PERI-RP |

UNCLASSIFIED

SECURITY CLASSIFICATION OF THIS PAGE(When Data Entered)

ARI Research Note 91-44

19. ABSTRACT (Continued)

At our Army sponsor's request, we are turning that material into a report so that the information can be used by the whole range of professionals--including commanders, policy makers, and online service providers--charged with taking care of Army families.

UNCLASSIFIED

SECURITY CLASSIFICATION OF THIS PAGE(When Data Entered)

NOTE: The views, opinions, and findings in this report are those of the author(s) and should not be construed as an official Department of the Army position, policy, or decision, unless so designated by other authorized documents.

FOREWORD

The U.S. Army Research Institute for the Behavioral and Social Sciences (ARI) Army Family Research Program (AFRP) has provided research support for our sponsor, the U.S. Army Community and Family Support Center (CFSC), and for the Army Chief of Staff's (CSA) Army Family Action Plans (AFAP) since 1986. This report explains the workings of the project and summarizes progress, to date, in meeting the research objective. That objective is to support the AFAP through research products that (1) determine the demographic characteristics of Army families, (2) identify ways to improve family adaptation to Army life, (3) increase the Army sense of community and partnership, (4) increase family support for retention, and (5) identify family factors that impact on individual and unit readiness.

In addition, the report provides a complete list of completed products and products projected to be completed by end of FY91.

The report is based on a series of briefings given by Dr. Bell to future garrison commanders in training at the Army's Logistical Management College at Fort Lee, Virginia. At our Army sponsor's request, we are turning that material into a report so that the information can be used by the whole range of professionals charged with taking care of Army families, including commanders, policy makers, program managers, and online service providers.

ARI, with the assistance of the Research Triangle Institute, Caliber Associates, Decision Science Consortium, Inc., HumRRO, and the University of North Carolina, is conducting the research. The research is being performed under the sponsorship of CFSC pursuant to the letter of agreement dated 18 December 1986, "Sponsorship of ARI Army Family Research."

THE ARMY FAMILY RESEARCH PROGRAM: ORIGIN, PURPOSE AND ACCOMPLISHMENTS

EXECUTIVE SUMMARY

Requirement:

The objective of the Army Family Research Program (AFRP) is to support the Army Family Action Plan (AFAP) through research products that will (1) determine the demographic characteristics of Army families, (2) identify ways to improve family adaptation to Army life, (3) increase the Army's sense of community and partnership, (4) increase family support for retention, and (5) demonstrate which family factors impact on individual and unit readiness. The purpose of this paper is to describe the purpose, structure, history, and accomplishments of the AFRP.

Procedure:

This report is based on a review of key Army and U.S. Army Research Institute for the Behavioral and Social Sciences (ARI) documents that discuss Army families, the needs for research, and relevant research findings. Since this report was essentially a literature review, no statistical operations were performed.

Findings:

The AFRP came into being in November of 1986 in response to calls for research contained in the CSA 1983 White Paper on the Army family and the Army Family Action Plans (1984-1991). The work was divided into three phases: developmental (11/86-12/88), survey (1/89-12/89), and analysis (12/89 to present). The project has produced 67 reports, journal articles, and professional presentations and more than 85 briefings for general officers and others interested in this area.

AFRP's main scientific contribution is the importance of spouse support in retention, the nature of spouse employment issues, and improved understanding and measurement of the project's main outcomes: adaptation, retention, and individual/unit readiness. The project has contributed to the understanding of how the attitudes of boy/girl friends contributed to the retention and productivity of single soldiers.

The project has also provided significant help to CFSC in the form of an analysis of the 1987 Annual Survey of Army Families that has been distributed Army-wide for use by local Army agencies, input to Congressional hearings on Army family programs and policies, and evaluation of Army helping programs in Operation Desert Shield/Storm.

Utilization of Findings:

This document will provide researchers and Army program managers needed background on the purpose, structure, history, and accomplishments of this important Army project. This report is based on an oral presentation with the same title that was given to military family policy makers, program managers, and researchers at the DoD Military Family Research Review Conference at Andrews Air Force Base, Maryland, on 7 February 1990 and on a series of briefings given at Fort Lee's Garrison Commander's Course.

THE ARMY FAMILY RESEARCH PROGRAM: ORIGIN, PURPOSE AND
ACCOMPLISHMENTS

CONTENTS

| | Page |
|---|------|
| ORIGIN AND PURPOSE OF THE ARMY FAMILY RESEARCH PROGRAM | 1 |
| The AFRP Charter | 4 |
| Project History | 8 |
| FAMILY DEMOGRAPHY | 10 |
| Women Soldiers | 12 |
| Single Parents | 12 |
| Young Marriages | 12 |
| Army Consequences Associated with Demography | 12 |
| INDIVIDUAL AND FAMILY ADAPTATION | 14 |
| COMMUNITY AND PARTNERSHIP | 15 |
| Community Characteristics | 16 |
| Community Resources | 19 |
| SOLDIER RETENTION | 21 |
| Sources | 21 |
| Findings | 21 |
| INDIVIDUAL AND UNIT READINESS | 23 |
| Definitions and Issues | 23 |
| Measuring Readiness | 24 |
| The Relation of Families to Readiness | 25 |
| Future Analyses | 31 |
| REFERENCES | 32 |
| APPENDIX A. ARI IN-HOUSE ARMY FAMILY PRODUCTS | 39 |
| B. ARMY FAMILY RESEARCH PROGRAM | 43 |
| C. DATA COLLECTION PROCEDURE | 51 |
| D. EXPECTED FY91 AND FY92 PRODUCTS | 58 |

CONTENTS (Continued)

Page

LIST OF FIGURES

| | | |
|-----------|--|----|
| Figure 1. | The AFRP charter | 5 |
| 2. | How did the Army Family Research Program originate? | 7 |
| 3. | The "marriage profile" of the Army is changing | 11 |
| 4. | Soldiers marry earlier than civilians | 13 |
| 5. | Soldier and unit readiness measures | 26 |

**THE ARMY FAMILY RESEARCH PROGRAM:
ORIGIN, PURPOSE, AND ACCOMPLISHMENTS**

ORIGIN AND PURPOSE OF THE ARMY FAMILY RESEARCH PROGRAM

The relationship between the Army and its families has changed considerably since the Army began in 1776. In those days, military leaders assumed that all soldiers had already taken care of the welfare of their families before they left home. If they had not, it was no business of the Army's.

Thus, the Army did not provide for any of the family's needs unless families marched with the Army and provided support functions (e.g., carrying water, cooking, mending clothes, and caring for the sick). If family members functioned as "support troops," the Army would then provide rations, tenting, and transportation (Bell & Iadeluca, 1987).

Gradually the Army added other benefits and services to create the current family support system. Pensions for the families of fallen officers were granted in 1794 (and for NCO families in 1802). The next major benefit, also instituted in 1802, was a spouse employment program in the form of the "company laundress," which allowed dual income NCO families to maintain themselves. The Army provided family housing for commanding officers of coastal defenses in 1815 so that these mostly married officers could quickly assemble the defenders in case of attack. This same benefit was then extended to other officers in the frontier forts such as Riley and Leavenworth, which were being built in the 1840s. The Army also gave NCOs space for their families but did not give federal help in the actual construction of the quarters (Fisher, 1983). In 1917, the Army added family allotments to its family benefits. Prior to that time, all soldier pay and benefits were given directly to the soldier. With this allotment the Army acknowledged its direct obligation to the families of current active duty personnel.

During World War II the Army worked with two non-governmental agencies, the United Service Organization (USO) and the American National Red Cross, to provide social services to soldiers and families. The Army's only other service agency at that time was the Army Emergency Relief Agency (AER), which provided financial assistance to families.

The modern system of delivering family services did not arrive until 1965 with the creation of the Army Community Service (ACS) agency (Bell & Iadeluca, 1987). There were multiple reasons for creating one central agency to coordinate family programs and services: (1) the increase in the number of married soldiers needed to maintain a standing Army, (2) the inadequacy of the then-current system (described by Patton [1980] as consisting of the "good Samaritan wife-volunteer and a simplistic trio of

answer men: the medic, the Chaplain, and the Legal Officer"), to meet family needs, and (3) the realization that family problems were having an impact on soldier performance. The other major parts of the current system--family violence services and formal child care services--were added in 1974 and 1977, respectively.

Although these programs have existed throughout the 1980s, they have not been without controversy. Repeated Army surveys show that some families are dissatisfied with the availability and/or quality of housing, medical care, and child care (Military Family Resource Center, 1984). In addition, the surveys also indicate that (1) some families are unaware of the existence of certain programs/services (2) some family members have difficulty accessing programs and services.

In 1980, 1981, and 1982 the Officers' Wives Club of the Greater Washington Area and the Association of the United States Army sponsored a series of Army Family Symposia that brought together family members from all over the world to discuss changes in the services and programs provided by the Army. Among the key issues discussed was the need for (1) employment assistance for spouses, (2) establishment of minimum standards for acceptable education for children, (3) better medical and dental care, (4) documentation of the professional development acquired by volunteers, (5) expanded public transportation, (6) improved youth activities, (7) improved sponsorship programs, (8) improved quarters termination procedures, (9) improved child care facilities/ operations, (10) recognition of and sensitivity to the individuality of family members, and (11) centralization of family support activities (Chief of Staff, U.S. Army, 1983).

Senior Army officials such as the 1984 Chief of Staff of the Army (CSA), GEN Edward C. "Shy" Myer and the Deputy Chief of Staff of Personnel, LTG Maxwell Thurman attended the conferences. The Army listened and responded to the families. One response was the creation of the Family Liaison Office (FLO) in the Office of the Deputy Chief of Staff of Personnel (ODCSPER) in 1982 with a staff and hot line to increase communications between the Army and the families.

In addition, a Family Action Planning Conference was held at Ft. Belvoir in July of 1983 to begin formulating solutions to the issues raised in the Army Symposia and to report back to the families the progress that had been made in solving these concerns. GEN John A. Wickham, Jr. (the new CSA) also prepared a position paper that outlined the Army's policy regarding families. (White Paper 1983: The Army Family [Chief of Staff, U.S. Army, 1983]).

During 1984, the "Year of the Army Family", the Army published the first Army Family Action Plan (AFAP) and

established the U.S. Army Community and Family Support Center (CFSC) to oversee family programs.

The Army leadership realized early that the issues being raised by the families were not always easily addressed. Some issues required too many resources, some were beyond the Army's control, and others were a symptom of some larger, more complex problems. Therefore, although the Army started to work on the identified problems immediately, it requested research assistance to examine the more complex, long term issues.

The White Paper outlined a number of areas in which research could make significant contributions. In particular, research could be helpful in developing low-cost, innovative ways to promote family adaptation to Army life (which the CSA called "wellness") and in identifying ways of increasing the coherence and efficiency of the service delivery system. The following quotations illustrate the CSA's philosophy and research objectives.

In promoting family wellness, we must also find ways to transfer the skills, experiences, and attitudes, and ethical strengths of the many healthy Army families... we must research and promote the positive aspects of Army families as our primary goal (Chief of Staff, U.S. Army, no page).

Our data bases can assist us in a target analysis for family programs to better deliver the help needed and properly utilize resources (Chief of Staff, U.S. Army, 1983, p.11)

... ad hoc programs established on a piecemeal basis that treat the symptoms but not the causes of family stress are no longer sufficient... [the philosophy of partnership] forms the basis for a review of existing programs and sets the stage for the development of an Army Family Action Plan that will provide the road map to move us to the 1990's (Chief of Staff, U. S. Army, 1983, p. 16).

We must avoid the "shotgun" approach by identifying specific needs and prioritizing them to ensure that we spend our money where it will make the greatest difference... we must define areas where research and studies are necessary to target effectively resources and programs. There is a pressing need for basic research on the role of Army families and the effects.... of Army life on those families. While we have made progress in this area, reliable data are still rare.... without this information, we will be groping in the dark and will never approach the maximum possible level of effectiveness (Chief of Staff, U.S. Army, 1983, p. 20).

The first AFAP was much more specific about the areas in which research could make the greatest contribution (ODCSPER, 1984). In addition to providing a complete list of what families said they needed, the AFAP also outlined the 5 major research objectives which were to shape subsequent Army family research efforts. Specifically research was to:

- . Provide demographic data on Army families.
- . Describe relationships between retention and family factors.
- . Describe relationships between readiness and family factors.
- . Determine how to foster a sense of community and partnership.
- . Determine the best ways to promote family wellness.
(ODCSPER, 1984, p. 38)

The AFRP Charter.

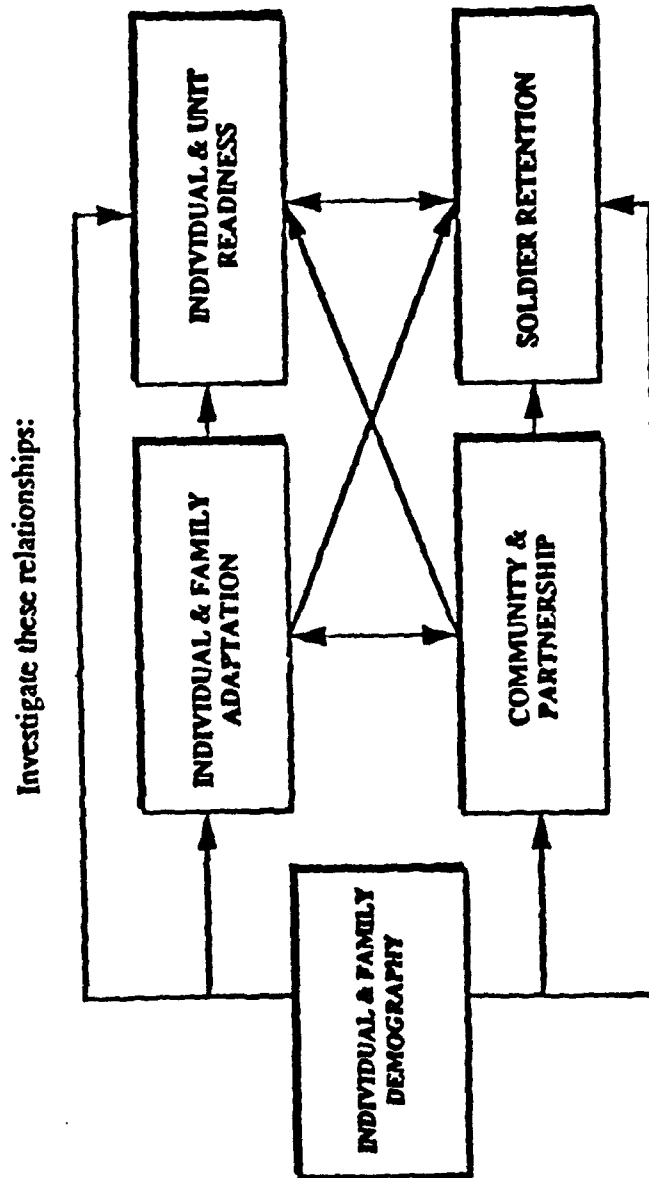
The CSA White Paper and the First Army Family Action Plan formed the charter for ARI's family research (the Army Family Research Program or AFRP). This charter is summarized in Figure 1 which outlines the interrelationships between the 5 research areas. This "model" is not intended to represent all that is actually known about families and their relationship to the Army, nor will it be formally "tested". Rather, it merely outlines AFAP and CSA research objectives and serves as a convenient starting point for future empirical efforts.

Individual & Family Demography. The understanding of Army family demography is fundamental to subsequent research efforts because it represents the web of attitudes and experiences soldiers bring to the Army which influence their future behaviors and experiences. For example, demography has been shown to be related to adaptation. Specifically, the families of junior enlisted personnel have more difficulties with family separations. These difficulties, in turn, can negatively effect the soldier's ability to attend and concentrate on field exercises and, therefore, the unit's ability to get its job done. Demographic factors are also associated with retention. For example, Vernez (1990) reports that enlisted soldiers who are married, or have children in the first tour, are much more likely to leave prior to the completion of their term of service. In short, knowledge of Army family demography can assist policy makers and planners in anticipating family needs, evaluating how community resources might be shaped to meet these needs and judging the extent to which family characteristics affect outcomes such as readiness and retention.

THE AFRP CHARTER

"THERE IS A PRESSING NEED FOR BASIC RESEARCH ON THE ROLE OF ARMY FAMILIES AND THE EFFECT, BOTH POSITIVE AND NEGATIVE, OF ARMY LIFE ON THESE FAMILIES"

CSA, Army White Paper, 1983



AFAP, 1984-1989

Figure 1

Individual & Family Adaptation. Adaptation represents the extent to which soldiers and their families adjust to the Army way of life and is determined, in part, by the kinds of coping resources available to family members. Poorly adapting families can reduce soldier (and unit) performance, readiness and retention.

Community & Partnership. The ability of the community to help families adapt is expected to have a measurable influence on the unit's ability to function. Families in supportive communities will be more satisfied with their environment and, in turn, more supportive of the soldier making the Army a career.

Individual & Unit Readiness. The ability of the unit to accomplish its mission is hypothesized to be a function of the qualities of unit members, the support they receive from their families and the extent to which the unit supports its constituent families. Consequently, we expect that soldiers in supportive units will remain in the Army longer than those in unsupportive units. And, higher retention of quality soldiers is of considerable importance not only to units, but also to the Army's ability to carry out its mission.

Soldier Retention. Retention is one of the key outcomes of interest to Army planners and decision- and policy- makers. Previous research established that family structure and attitudes influence retention (for example, married soldiers have higher a retention rate than single soldiers). AFRP research is designed to further explicate these relationships and assist the Army in its efforts to retain high quality soldiers.

The important events leading up to receipt of the charter are summarized in Figure 2.

To better understand the project's accomplishments, we must pause here to briefly discuss the major events which transpired between 1984 and 1990 and shaped the project. After this, we will describe the major issues to be addressed, accomplishments to date, and future plans within each of the CSA's mission areas: (1) demography, (2) community, (3) wellness (now conceptualized as family adaptation), (4) retention, and (5) readiness.

HOW DID THE ARMY FAMILY RESEARCH PROGRAM ORIGINATE?

ARMY FAMILY AGENCIES:

- Army Family Liaison Office, 1982
- CFSC, 1984

*CSA White Paper, 1983
Family Action Plan, 1983-1991
Mandates Family Research*

*Wives' Symposia
Create Army Family
Agenda, 1980-1982*

UNMET ARMY NEEDS:

- Quality Recruitment
- Quality Retention
- Information to Expand/
Manage/Justify Programs

UNMET FAMILY NEEDS:

- Medical Care
- Housing
- Relocation
- Spouse Employment
- Valued Treatment of Army Spouses



Figure 2

Project History.

ARI's first step in planning the implementation of the CSA and AFAP mandate was to ensure that the work would have sufficient resources to succeed. To accomplish this, a special funding line, Army Program Implementation Package (now called Management Decision Package), was established to underwrite the activities of ARI, the Walter Reed Army Institute of Research (WRAIR), and CFSC during a five year period beginning in October of 1985. In the meantime, ARI embarked upon a number of family research projects that could be sustained by existing resources.

The following topics were examined: (1) single parents (Teplitzky, Hedlund, and Nogami, 1987), (2) dual military couples (Teplitzky, 1988; Teplitzky, Thomas, and Nogami, 1988; and Lakhani, 1988), (3) family housing (Nogami & Urgan, 1986), (4) effects of families on readiness (Pliske, 1988) and retention (Croan, Bowen, Farkas, Glickman, Orthner, Nogami, Gade, & Tremble, 1987; Lakhani, Gade, & Nogami, 1987; and Smith, 1988), and (5) the early experiences of newly commissioned officers from ROTC, the U.S. Military Academy at West Point, and those with direct commissioning. This work on newly commissioned officers (now called Longitudinal Research on Officer Careers or LROC) was highly relevant to family research because marriage was one of the critical experiences being studied (Sweeney, Connelly, Dunn, Ghazalah, & Burdick, 1989). A list of all ARI reports that examine Army families appears in Appendix A.

In response to the CSA's desire to see the research aiding the development of actual family policies and practices, ARI established a contractual relationship with CFSC. The agencies signed a Letter of Agreement (LOA) which described the relationship and established certain mechanisms to help ensure the success of this project. The parties agreed to conduct regular CFSC-ARI meetings to ensure that Army interests were being met and agreed upon. In addition, ARI and CFSC agreed to the creation of a Scientific Advisory Committee or SAC (to assist in technical issues) and agreed that all products would be formally reviewed by CFSC.

ARI first envisioned that the family research would be conducted by new staff specially recruited for their expertise in this area. However, when this strategy became impractical because of manpower ceilings, a group of ARI scientists and academic specialists convened to design a five-year, multi-million dollar contract which was awarded in November, 1986 (Segal, 1987).

In addition, ARI established close working relationships with virtually all of the potential major users of the research such as the Department of Defense and Department of Army staff and major Army schools that teach courses on family matters. ARI

has also worked closely with other agencies conducting family research including: (1) WRAIR, (2) the Rand Corporation, and (3) the DoD Manpower Data Center (DMDC).

Shifting requirements and resources impeded the project's progress from the start. The 1986 AFAP added requirements that research also address the family needs of civilian employees and reservists. To meet these requirements, reports on the families of civilian employees in Europe (Kralj et al., 1988) as well as on families in the National Guard (Bray & Thesen, 1988a), and Army Reserves (Bray & Thesen, 1988b) were produced. (These reports on reservists are summarized in a CFSC publication by Griffith et al., 1989 a&b.) However, on advice of the SAC, such efforts were limited to these specific reports in order to conserve project resources.

The CSA's mandate to establish linkages between families and retention was enlarged to include the factors that would be most influential in the retention of high-performing soldiers as well as soldiers in general. This feature, added by the project staff, is particularly pertinent given current efforts to downsize the force. The current CSA, GEN Vuono, stresses the need for the retention of high performers to meet the increased missions which will have to be assumed by the smaller force:

More than any other characteristic, the quality of our people - soldiers and civilians - will determine the versatility of the future Army... Only by caring for our soldiers and their families will we be able to meet our most essential imperative, that of attracting and retaining high quality men and women (Vuono, 1990, p. 12).

Although Army leadership has expressed considerable concern about family wellbeing as demonstrated by the writings of recent CSAs, we must also recognize that many Army services or programs are provided because it is required by law or, more importantly, it is the "right thing to do."

This notion of "equity" (assisting families because we are obligated to do it) rather than "instrumentality" (assisting families because it benefits the Army) is captured in the ACS slogan "The Army takes care of it's own" and in some of GEN Wickham's writings about partnership. Both perspectives are reflected in the following sentiment expressed by GEN Vuono:

Therefore, if we are to attract the best our nation has to offer we must continue to offer them the personal and professional challenges, and quality of life equal to the citizens they are sworn to defend (emphasis added) (Vuono, 1990, p. 3).

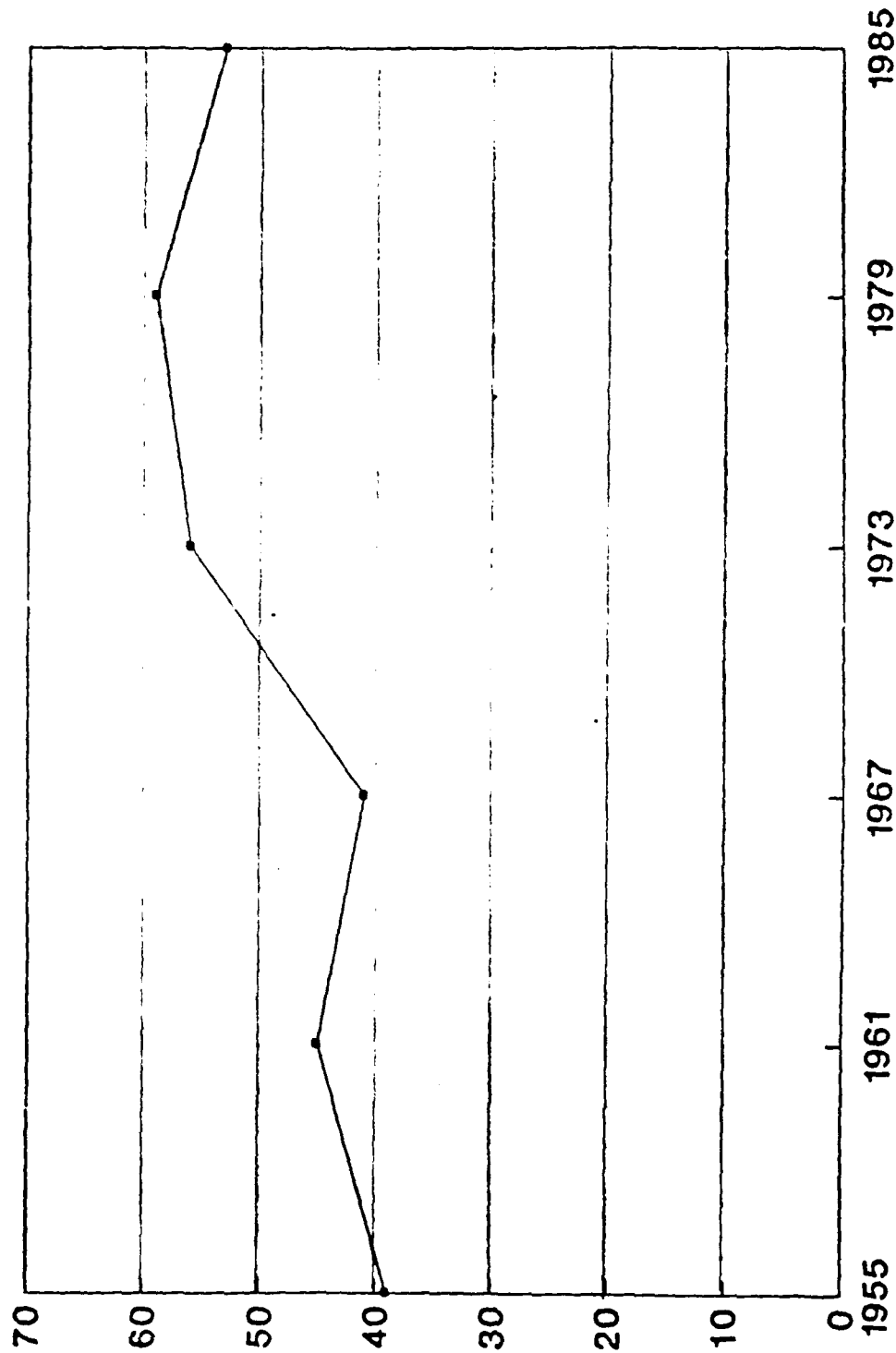
The primary source materials for the summaries below come from four presentations by AFRP scientists to the Military Family Research Review (7-9 February, 1990) held at Andrews Air Force Base in the Maryland suburbs of Washington, DC. They cover the four main areas of the AFRP during the first 28 months of the project (i.e., November 1986 through February 1989). The areas and reports were: (1) families and adaptation (Orthner & Bowen, 1990), (2) spouse employment (Scarville, 1990), (3) families and retention (Orthner, 1990) and (4) families and readiness (Oliver, 1990). Additional AFRP and other materials will be used as needed to show what is known in the five areas covered in the charter: demography, adaptation, community & partnership, retention, and readiness. We have also included a complete list of AFRP research products in Appendix B for reference.

In addition to literature reviews of the five areas specified by the CSA, AFRP scientists also designed and executed a world-wide survey of Army personnel. Specific information on the AFRP data base is reported in Appendix C. Also covered in a separate appendix (Appendix D) is a brief summary of each of the 15 reports that are based on this data collection and scheduled to be released in FY91 and FY92.

FAMILY DEMOGRAPHY

Throughout most of its history, the Army has attempted to ensure that the junior enlisted personnel remained single. Disincentives to marriage such as low pay, frequent relocations, and various other policies discouraged marriage among junior enlisted personnel (Bell & Iadeluca, 1987). When the Army expanded in the 1960s to assume a world-wide mission, these policies were no longer in its best interest. Thus, the proportion of the force that was married jumped from 39% in 1955 to approximately 45% in 1961 (see Figure 3). With the advent of the All Volunteer Force (AVF) in 1973, the percent married jumped to 58% and has remained over 50% ever since. In fact, the current estimate is that 59% of the force is married (McCalla, Rakoff, Doering & Mahoney, 1986). Other changes since the advent of the AVF have been an increase in the number of: (1) women, (2) single parents, and (3) young enlisted soldiers who are married. Since all three of these changes have a potential impact upon retention and readiness, they will be discussed separately.

THE "MARRIAGE PROFILE" OF THE ARMY IS CHANGING PERCENT OF MARRIED SOLDIERS 1955-1985



Source: Rand Corp (1987)

Page 7

Women soldiers.

Part of the plan to create an all volunteer force included increasing the proportion of female soldiers from 2% to 10% of the force. Since female soldiers typically marry other male military personnel, the increase in female soldiers resulted in a marked increase in the number of dual military couples in the Army. In fact, data from the 1985 DoD survey of military personnel indicates that approximately 4% of the force (8% of the marriages) is in a dual military marriage (McCalla et al., 1986).

Single Parents.

In the early days of the AVF anyone who became a single parent was discharged from service. Although this policy was justified as a way of increasing force readiness, it had an adverse effect on keeping enough soldiers in the system. AFRP research shows that the primary cause of single parenthood is divorce. Not surprisingly, research on civilians also shows that single parenthood is principally the result of divorce. However, one of the differences between the Army and society at large is that in the Army, the majority of single parents are male (56% according to a recent Rand Corporation report), whereas over 90% of single parents in the civilian sector are female.

Young marriages.

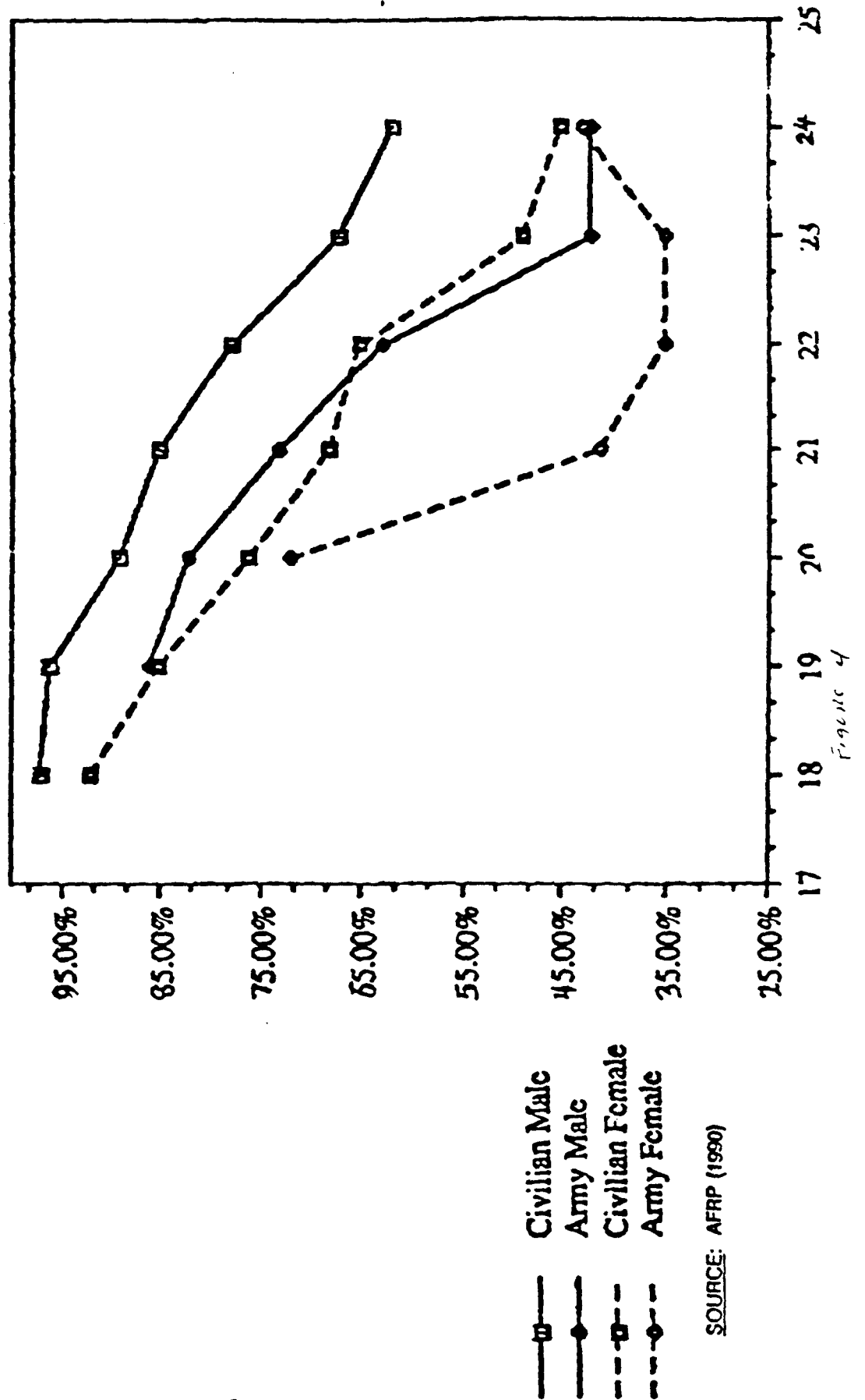
Although there are few differences between officers and civilians on age at first marriage, enlisted soldiers are more likely to marry at younger ages than comparable civilians. Indeed, a recent comparison between AFRP respondents and respondents from the Current Population Survey of the Bureau of the Census shows that the marriage rate for enlisted soldiers was significantly higher than that for civilian, non-Hispanic Caucasians. In comparisons between enlisted soldiers and African Americans, once again enlisted personnel were found to marry at earlier ages (Orthner and Bowen, in preparation).

Army consequences associated with demography.

ARI has conducted extensive investigations on the consequences of increased female presence upon unit performance. The results are consistent: females do not degrade unit performance (Johnson, Cory, Day & Oliver, 1978; Schreiber & Woelfel, 1979; U.S. Army Research Institute, 1977). Marital status and parenthood are other demographic factors that may influence Army outcomes. ARI did not find that single parenthood or dual military marriages had a detrimental effect on unit outcomes.

SOLDIERS MARRY EARLIER THAN CIVILIANS

Percent Never-Married Among Whites



Both the Rand Corporation and WRAIR have investigated the effects of dual military and single parents upon the ability of soldiers to deploy. WRAIR found no difference in the rate of actual deployment among single parents, dual military couples, and other soldiers in either the Grenada campaign or "Operation Just Cause" in Panama. However, Rand did find differences among these groups in their ability to participate in field exercises and no notice alerts. Interviews with field commanders suggest how these findings can be reconciled; soldiers who cannot rapidly deploy are routinely transferred out of the rapid deployment groups that were studied by WRAIR (Blankinship, Bullman & Croan, 1990).

In related research on the consequences of family structure on Army outcomes, Rand researchers (Vernez & Zellman, 1987) found that marital status and parenthood were associated with the use of family services and attrition. Specifically, enlisted soldiers who enter the service married or get married or have children during their first tour use a disproportionate amount of Army services and are less likely to complete their tour of duty.

INDIVIDUAL & FAMILY ADAPTATION

The White Paper challenged the Army community to assist families in achieving a state of "wellness". In their effort to meet this charge, AFRP researchers focused on identifying the stressors associated with military life and the factors associated with family wellbeing. These were to be the first steps toward the goal of identifying adaptation processes and how the Army might assist families in adjusting to the military way of life.

Adaptation is generally defined as the degree of "fit" which exists between families and their environment. The family literature speaks of two types of fit. The first, called the "demands-abilities fit," reflects the individual or collective ability of family members to meet the environmental demands on the family system. The second type of fit is called the "need-resources fit" and focuses on the congruency between the individual and collective needs of family members and the resources and opportunities available for the family and/or its members to meet these needs. The "adaptive" family, therefore, is one in which collective needs can be met without preventing any individual member(s) from meeting his/her personal goals. Indeed, AFRP researchers have hypothesized that the ability of the family system to meet its individual and collective needs and goals within the military environment will lead to a positive behavioral and emotional response to this environment.

Military leaders are aware of the importance of family adaptation to military outcomes. Evidence of this awareness is reflected in leaders' references to the "goodness of fit" between the family needs and military needs as "shared purpose," "mutuality," "partnership," and "military-family fit" (Orthner & Bowen, 1990).

The latest contribution of the AFRP has been in the conceptualization and construction of an Army family adaptation measure. Researchers used structural equation modeling to demonstrate how family conditions and strengths contribute to the ability of families to adapt to Army life (Orthner, Zimmerman, Bowen, Gaddy & Bell, in preparation). The newly developed adaptation measure will be used in future AFRP projects to trace how Army factors influence family adaptation and how adaptation, in turn, influences soldier readiness and retention.

Earlier AFRP efforts had already shown the importance of Army actions on family adjustment (Orthner & Bowen, 1990). The unit activities and practices which research has shown to make a positive contribution to family adjustment and commitment to the Army include: (1) assigning families helpful sponsors (Bell, 1990), (2) allowing soldiers ample time off to re-settle their families after a move (Kirkland & Katz, 1989) and, (3) having an active Family Support Group (FSG) and rear detachment during unit deployments (Kirkland & Katz, 1989).

COMMUNITY AND PARTNERSHIP

As mentioned earlier, CSA Wickham described the partnership between the Army and its families and noted the importance of families in helping the Army achieve its missions in his 1983 White Paper. The sense of community and commitment to family wellness described in the White Paper is the culmination of a long process in which the Army increasingly recognized its responsibility to the family members of its personnel.

Researchers have used a variety of typologies to define "community." Physical versus social and micro versus macro are just two of such conceptualizations (Orthner et al., 1987). The Army community is herein presumed to consist of two dimensions, each of which contributes to inhabitants' satisfaction with their community and the Army lifestyle: (1) community characteristics such as the incidence of social problems or types of housing available and (2) community resources such as formal and informal support systems which promote adaptation and integration (taken from Orthner et al., 1987).

Orthner and colleagues (1987) bring together a broad spectrum of personal, community, job, and Army variables which are expected to influence families' perceptions, experiences, and

behaviors. Their "Community Impact Model" specifies a series of relationships in which background factors (e.g., family characteristics, Army policies and practices), environmental conditions (e.g., community and job conditions, support programs), and family perceptions (e.g., satisfaction with family, community, job, and Army culture) influence members' and spouses' assessment of the desirability of Army life. Ultimately, this web of relationships is hypothesized to predict those behavioral outcomes of chief interest to the Army; namely, spouse preparedness, member readiness and retention, and unit readiness.

In addition to influencing these Army outcomes, aspects of the community also affect a family's ability to adapt to a new environment. The relationship between community support and involvement and family adaptation was investigated by McCubbin and associates' (Lavee, McCubbin, & Patterson, 1985) test of the Double ABCX model of family stress and adaptation.¹ Their results indicated that the family's perceptions of community support and its involvement in community activities influenced family coherence and meaning, and, ultimately, influenced family adaptation.

This section will explore several aspects of Army communities which are thought to influence families' satisfaction with their environment. First, community characteristics and the extent to which Army families are satisfied with certain aspects of their communities will be examined. This section concludes with a review of the informal and formal systems of support.

Community characteristics.

Research suggests two fundamental propositions regarding the relationship between community characteristics and satisfaction: (1) family characteristics mold family expectations of and satisfaction with their environment and (2) physical characteristics of the environment influence people's satisfaction with the community. With regard to the relationship between family expectations and community satisfaction, Orthner and colleagues (1987) point out that family life stage influences satisfaction with the community. The researchers suggest that families at different life stages have different levels of involvement in community activities and hold varying expectations of the community. For example, although the availability and quality of schools and recreational facilities may be salient to families at early life stages, older families without children in

¹ Lavee and associates posit a model of family stress in which the pile-up of demands (A factors), family adaptive resources (B factors) and family perception and coherence (C factors) predict family adaptation (X factors).

the home may be more concerned with local politics or community support programs. In short, peoples' perceptions of their communities are, in part, colored by their stage in the life cycle. Other family characteristics which have been found to influence community satisfaction are the degree of community involvement and number of relocations (Orthner, 1987).

Similarly, there is research on the second proposition - that community characteristics influence residents' satisfaction. Characteristics such as climate, quality of support facilities such as leisure facilities, community size, physical layout, and esthetics, are expected to influence residents' satisfaction (Orthner, 1987).

Analysis of the 1985 DOD survey of military spouses yields some information about spouses' perceptions of community climate and leisure facilities in their community. One out of two wives rated their community's climate as good or excellent (Griffith, LaVange, Gabel, Doering & Mahoney, 1986). Most wives are also satisfied with recreational facilities. Almost half of enlisted wives and over half of officer's wives rate their recreational facilities as either good or excellent (Griffith, LaVange, Gabel, Doering & Mahoney, 1986).

Although the data base does not contain information on residents' satisfaction about the size, layout or esthetics of their communities, it does contain other information of value. Over half of all spouses are satisfied with their proximity to population centers. And, almost half of enlisted spouses and over half of officer spouses felt that the availability of goods and services at post was satisfactory. However, there were large differences between officer's and enlisted spouses attitudes on other aspects of the community. In general, officer's spouses rated their community much more favorably than enlisted wives. For example, although 59% of officer's spouses indicated that their community provided at least a good environment for children, only 31% of enlisted spouses felt similarly about their community. Similarly, more officer's spouses reported that residents had favorable attitudes toward military families than did enlisted spouses (62% versus 42%). As expected, there were also differences in families' abilities to handle the costs of living at their locations; more officer families were able to meet local costs than enlisted families (Griffith, LaVange, Gabel, Doering & Mahoney, 1986).

The prevalence of social problems also affects families' satisfaction with their communities. Twenty one percent of enlisted spouses indicated that alcohol use was a serious problem in their community. Enlisted wives also mentioned that drug use (12%) and crime (12%) were serious social problems in their communities (Griffith, LaVange, Gabel, Doering, & Mahoney, 1986).

An important part of the Army "sense of community" is derived from residents' feelings about their housing situation. Housing circumstances influence residents' feelings about their community as well as their personal wellbeing. For example, earlier research done by ARI scientists indicates that "stairwell living" has a profound influence on residents' lives.² Stairwell families in USAREUR reported more substance abuse and theft than families in other housing situations. Stairwell families also reported more psychological symptoms - isolation and boredom (Saynisch, 1980).

Perceptions about the availability and quality of housing are other important considerations when examining military families' satisfaction with their communities. The supply of military housing often does not meet the demand. Since eligibility for on-post housing increases with rank, those who can least afford it are forced to take off-post housing. Recent Army data indicates that in 1987, approximately 38% of Army wives lived in on-post government housing. The remainder lived off post in property they either rented (37%), owned or were buying (15%), or leased from the government (8%; Griffith, Gabel, & Stewart, 1988). As expected, junior enlisted were least likely to be living on-post. The other major difference between enlisted and officer families with regard to housing reflects their contrasting economic circumstances; officer families were more likely to own their off-post homes and enlisted were more likely to be renting off-post. Overall, most Army families preferred to reside on-post (42%) or to own off-post (37%).

Although almost half of enlisted and officer's spouses rated the availability of military housing as at least fair, many more (64% enlisted wives, 75% officer's wives) thought that civilian housing was much more available (Griffith, LaVange, Gabel, Doering, & Mahoney, 1986).

Satisfaction with current housing depends upon the type of housing in which the family resides, according to data from the 1987 Survey of Army Families (SAF). Satisfaction was highest among those who owned their homes (92%) followed by those who were in on-post government housing (64%). It was lowest (54%) for those renting off-post.

The SAF also asked respondents who lived in government housing whether they were satisfied with specific aspects of their housing and communities. Satisfaction was highest with housing location (83%), trash collection (78%), and the maintenance of appliances and equipment (64%). Alternatively,

² "Stairwell families" live in multidwelling housing units in which a common area or landing is shared by the residents of 4 or more units.

one in three were dissatisfied with their storage space, security or the safety of play areas for children. In general, respondents who lived in on-post government housing were more satisfied with every aspect of their housing situation than those who were in off-post government leased housing (Griffith, Gabel, & Stewart, 1988).

Other factors which may influence satisfaction with community life (especially among families in the early life stages) are the availability and quality of child care services and the quality of the schools.

The availability of quality child care has become an increasingly important issue for both civilian and military families. Military families are at a particular disadvantage since they are often away from relatives and close friends who might otherwise be relied upon to provide care. Families must therefore rely upon child care centers, babysitting, family child care homes and other arrangements. Overall, about 58% of the spouses with children in Army child care centers were satisfied with the quality of the educational programs. Generally, parents whose children were in Army child care centers were more likely to be satisfied with the quality of the educational program than those with children in a family home or at a babysitter. There appears to be considerable dissatisfaction with the availability of drop-in care (46% dissatisfied), and the cost (38% dissatisfied), and hours of care (34% dissatisfied). In short, it appears that for some families, availability and/or convenience is more of a problem than quality when it comes to child care service delivery.

Overall, parents are satisfied with their childrens' education. Approximately three out of five Army wives are satisfied with the quality of their child's education (Griffith, Gabel, & Stewart, 1988).

Community resources.

Formal and informal support services are important community resources. Such services can help families adapt to a new environment, resolve family problems, and reach out to others in the community who may be in need of assistance.

Informal support. Family, friends, neighbors and voluntary organizations assist Army families in three ways (Weiss, 1982, cited by Orthner et al., 1987). They provide emotional support by listening to family members and advising them where possible. They provide instrumental support by acting as resources for loans, household necessities, child care and other goods and services needed by families. Finally, they provide informational

support by dispensing news, material or knowledge of the community to families.

Researchers have found that certain populations tend to be especially likely to lack strong, informal social support. In particular, men (especially bachelors), racial and ethnic minorities, the elderly, and newly divorced or separated families tend to have weak informal supports (Orthner et al., 1987).

Formal support services. Family support services such as those provided under the Army Community Services (ACS) umbrella are essential resources for the Army family. ACS provides both wellness programs and services such as career planning, employment skills training, or premarital counseling in addition to crisis management programs and services such as drug and alcohol treatment, family violence, and emergency loan services.

Unfortunately, those at greatest risk for experiencing family problems - junior enlisted families - are also least likely to be aware of the plethora of support services available to them. These families are vulnerable to stress from a variety of sources: they may be newly married, new to the Army, newly separated from family and friends, new parents, and/or in their first jobs. Yet, as pointed out earlier, these families are also more likely than older, experienced families to live off-post and be unaware of the services provided by the Army to assist them in these life transitions.

AFRP researchers have examined the extent to which family members are aware of and satisfied with family programs. Over half of all Army families have used ACS programs and 80% of the users have been satisfied with the quality of the services they received (Griffith, Gabel, & Stewart, 1988).

However, awareness and use of programs is uneven. Families were particularly likely to be aware of information and referral, family advocacy, crisis intervention and financial counseling programs (at least 60% of wives were aware of each of these programs according to Griffith, Gabel, & Stewart, 1987). Interestingly, location seemed to influence wives' awareness of certain programs. For example, almost twice as many OCONUS wives were aware of foster child care programs as were CONUS wives. Similarly, more OCONUS wives were aware of family advocacy programs than CONUS wives (79% versus 51%). One possible explanation of these location differences is that wives who are far from informal systems of support are more likely to seek out the formal support systems available to them.

With regard to program utilization, more families have used the information and referral (one in three) and financial counseling services (one in seven) than have used the other ACS programs according to the 1987 survey.

SOLDIER RETENTION

The Army has long appreciated the tie between the family and soldier retention. As General Myer used to say, "we recruit soldiers but we retain families." AFRP research has been able to demonstrate the extent to which that statement is true.

Sources.

ARI has produced some 20 documents during the last five years that address some aspect of the relationship between families and retention. The reports can be characterized as being: (1) initial analyses of new data bases (four reports), (2) further analyses of existing databases (four reports), (3) reviews of existing literature (two reports) and (4) a case study of pilot data (one report).

Findings.

AFRP analyses documented the extent to which military life influences retention. The more satisfied the soldier and family members are with military life, the higher the probability of reenlistment (Etheridge, 1989; Griffith, Stewart and Cato, 1986b). The best predictors of reenlistment among NCOs are the extent to which the soldier is committed to the Army, the soldier's tenure in the service and the soldier's assessment of his/her opportunities in the civilian sector. Soldier satisfaction with the military environment and with his/her family's ability to cope with the conditions of Army life, and his/her degree of organizational commitment are all positively and consistently related to retention (Bowen, 1986; Etheridge, 1989; Smith, 1988).

Other features of military life have varying effects on different families (Etheridge, 1989):

- (1) Travel, relocation, and family separation are sources of stress and dissatisfaction for some families although others view these characteristics of military life as neutral or desirable.
- 2) Family separation and relocation have a stronger effect on retention than satisfaction with location. However, location of choice can be a positive retention bonus.
- (3) Awareness of the existence of community programs (even when they are not used) increases satisfaction with military life and enhances retention.
- (4) The magnitude of the effects of such factors as pay, retirement, benefits, deployments, family separations,

working hours, job and marital satisfaction all depend on the soldier's stage in the "family life cycle" and "career life cycle".

Research has demonstrated that marriage and parenthood influence retention. For example, among enlisted males who entered single and without children, getting married increases the probability of reenlisting, and parenthood increases it even more. These relationships were found for enlisted men at all years of service groups (Rakoff & Doherty, 1989).

However, we do not see such increases among females (Rakoff & Doherty, 1989). For enlisted females, the effects of marriage and parenthood are smaller and different by year group.

The retention of officers fits a different pattern depending on the sex of the officer and their marital status at entry (Rakoff and Doherty, 1989).

AFRP researchers also identified linkages between spouse attitudes and soldier's retention. The more positive and supportive the spouse is about the soldier remaining in the military, the greater the likelihood of reenlistment (Etheridge, 1988). Spouse support for an Army career varies by pay grade for both enlisted and officers. In general, the higher the pay grade, the greater the support (Griffith, Stewart and Cato, 1988; Smith, 1988). Among those in the early career stages, spouse support is higher if the couple has children, the spouse has had prior experience with the military (e.g., having parent[s] with military experience), or the spouse is out of the labor force. The perception that Army leaders care about families increases this support (Griffith, Stewart and Cato, 1988).

Army policy makers are especially concerned about the retention (and readiness) of dual military couples and single parents. Research shows that female members of dual military couples are more likely than males to leave the service. The reasons for this appear to reflect the greater difficulties in balancing work and family demands for dual military families (Etheridge, 1988; Teplitzky, 1988; Teplitzky, Thomas and Nogami, 1988) and the greater responsibilities many women have to maintain family life. The most powerful predictors of career intent among dual military couples are identical to those affecting other couples (e.g., pay, benefits, and satisfaction with the Army). However, pregnancy, child care, and separate assignments can be especially problematic for dual military families (Teplitzky, 1988; Teplitzky, Thomas and Nogami, 1988; Lakhani, 1988).

Research also shows that single parents cope with work-family demands to the satisfaction of their supervisors. Teplitzky, Hedlund and Nogami (1987) noted that supervisors

believed that soldier attitudes such as motivation were more important determinants of readiness and performance than single parenthood.

Other research examined the impact of policy changes on soldier retention. Allowing soldiers to transfer their GI Bill educational benefits to their families would more than pay for itself in increased soldier retention (Lakhani, Gade and Nogami, 1987). Increasing the length of tour at a given location would increase the probability of spouses being employed and being employed in positions that fit their skills (Black, Hogan and Siegel, 1988).

INDIVIDUAL & UNIT READINESS

One of the chief missions of the AFRP was to demonstrate associations between family circumstances and the "readiness" of soldiers and their units (and, by extension, identify what the Army might do to make the Army-family interface more positive). This section will cover the definitions, issues, and methodology associated with the measurement of readiness. This is followed by a review of research findings on the relationships between family factors and soldier readiness. The section concludes with the plans for future reports.

Definitions and issues.

Kralj and colleagues' (1988) review of individual and unit readiness concludes that "soldier readiness" is:

...the capability of an individual in an Army unit to perform so that the unit may accomplish the mission for which it is organized (p.7).

Similarly, they define unit readiness as "...the capability of an Army unit to perform the mission for which it is organized" (p. 6).

Although these definitions are logical, they are difficult to operationalize. Most units are organized to function during combat, a condition that does not presently exist. Therefore, we must speculate about the capability of individuals and units to behave in a situation which does not currently exist.

The lack of any ultimate criteria (i.e., how individual soldiers and units actually behave relative to their designated mission) will make it virtually impossible to decide whose judgement (soldier's or supervisor's) we should use and how valid that judgement is. We can, nonetheless, attempt to improve on the current system by measuring more of the elements that are known to contribute to readiness and by providing better psychometric tools in the process. A better measure, in turn,

should improve our chances of discovering how families affect readiness.

Measuring Readiness.

The Army activity that most closely resembles an evaluation of readiness is the monthly assessment called the Unit Status Report (USR). The USR requires that battalion commanders report on the current condition of their personnel, equipment, and training. Personnel are assessed on three dimensions: personnel strength, the job qualifications of those assigned, and the proportion of the leadership positions currently filled. Equipment is assessed with regard to its availability and operational status. The training dimension reflects the commander's judgement of the training time necessary to make the unit fully operational (Sorely, 1980 & Pliske, 1988).

Although the Army continues to use this system, it is not without criticism (Sorely, 1980; U.S. Army Research Institute, 1981; Campbell, et al., 1988; Kralj, et al., 1988; Bell, 1990; & Oliver, 1990). One criticism of the USR is that it does not change in concert with known events (e.g., loss of personnel, change in mission, or change in leaders), and it does not incorporate any predictors of performance. Prior ARI research (O'Mara, 1989) showed that Army leaders believe that the best predictors of future behavior can be obtained from the elements which are not a part of the USR. Examples of such evidence are: (1) the judgments of senior commanders (e.g., judgement of the Deputy Commander for Maneuvers about the fitness of the maneuver battalions in his Division), (2) the behavior of the unit in prior "tests" (e.g., Field Training Exercises, ARTEPS, EDRs, and inspections), and (3) the judgments of the unit's NCOs.

There is also agreement that many determinants of unit performance in combat are not tested at all. Examples listed by Oliver (1990) include: leadership, job satisfaction, commitment, cohesion, morale, motivation and turnover within the battalion. Ironically, these areas are also those in which families are most likely to have an impact on both soldiers and units.

Based on this knowledge, the project attempted to develop new measures of individual and unit readiness which would allow sound judgments to be made on more of the critical elements believed to underlay both individual and unit readiness. Since we did not know a priori which judgment to use, we considered several. Individual Readiness could be ascertained through Army records, self report, or the judgments of supervisors. Unit Readiness could be assessed using Army records, and the evaluations of unit members (including enlisted soldiers, NCOs, and officers), and the evaluations of officers to whom the units reported. The project also included the collection of a variety of factual and opinion data to determine the extent to which such

data is related to readiness. A summary of what is available can be seen in Figure 3.

The relation of families to readiness.

Given the difficulties in defining and measuring individual and unit performance and readiness, it is not surprising that most research has been merely content to show that family factors are related to something generally acknowledged to be a part of (or an activity leading to) individual or unit readiness.

For many years researchers promulgated the "myth of separate worlds" (i.e., that work had no impact on families nor families upon work). However, recent civilian research reviewed by Teplitzky (1988b) and Pliske (1989) has shown that there is considerable interaction between the work world and family world and this interrelationship may affect job performance, job/family satisfaction, work-family conflict, stress, and absenteeism.

The military literature on this topic can be divided into the effects of families on: (1) the Army, (2) the unit, and (3) the soldiers themselves.

While considering the research on the linkages between families and soldier and unit readiness, the reader is reminded that there are many linkages between family members and the Army. For example, many family members function as paid professionals and volunteers at all levels of the Army to help the Army accomplish its functions. Eight percent of the soldiers are married to other soldiers and thus these "family members" have a direct impact on the Army mission. Also, one third of the Army's strength is made up of civilian employees -- many of whom are married to soldiers. Finally, family members form the bulk of volunteers for family agencies, support groups, sponsors and in countless other ways keep the system going (Bell & Iadeluca, 1987; Kirkland & Katz, 1989; Blankinship, 1990a; and Teitelbaum, 1990).

Effects on the Army. The inherent conflict between loyalty to one's family and to the Army may be a concern for soldiers and Army leaders today because the majority of our troops are married. During the American Civil War, the Confederate Army experienced large desertion rates from units whose families were in danger because of invasions from the federal forces (Lonn, 1965).

SOLDIER AND UNIT READINESS MEASURES

Supervisor Readiness Ratings

Teamwork
Initiative
General Soldiering
Mission Deployability
Family Deployability
Job Discipline
Technical Knowledge
Performance under Pressure
Concern for Subordinates
Concern for Families
Leadership
Training of Subordinates

Individual Performance

EER
OER
PRT
SQT
Articles 15
FLAG Actions
Letters of Commendation/Appreciation
Certificates of Commendation/Appreciation
Awards and Decorations

Self Appraisals

War Preparedness
Performance Comparison

Other Individual Readiness Measures

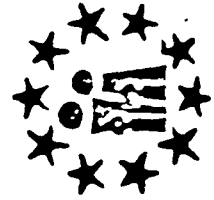
Time Off Duty for Personal Reasons
Unit Commander Ratings
Promotion Rate

Unit Readiness Ratings

Cohesion
Meeting Standards
Supplies and Equipment
Concern for Families
Concern for Soldiers
Leadership
Mission Performance
Personnel Capabilities
Deployability
Training
Unit Weapons
Vehicles and Transportation

Other Unit Readiness Measures

Unit Readiness Status Summary
Average Readiness of Individuals in Unit



Despite the fact that the majority (61%) of deserters from the American Army during the Vietnam War were single, family factors still played an important role (Bell and Houston, 1976). Forty percent of the unconvicted Army participants in the Ford Clemency Program for Vietnam Era deserters stated that they had deserted because of family, marital, or financial reasons (Bell & Houston, 1976).

Both conflicting loyalties and the sheer logistical problems associated with families retreating with their soldier husbands/fathers were blamed for the defeat of the South Vietnamese Army during one of their last campaigns. WRAIR research (Schneider, 1985) suggests that this problem might well confront the American Army in Europe should hostilities break out there. Researchers found that sizeable numbers of married soldiers had no faith that their families could be evacuated safely via the official Army system, the Non-Combatant Evacuation Operation (NEO), and, therefore, planned to evacuate their families themselves before returning to perform their combat duties. Despite these reports, we cannot predict how soldiers will respond when faced with the threat of combat. During operation "Just Cause", for instance, soldiers based in Panama and accompanied by their families left their families in place to fight with their units.

Civilian and military literature identifies stress as a factor affecting "worker productivity." Few Army spouses in the recent Annual Surveys of Army Families (Griffith, Stewart, & Cato, 1988) reported that they had serious problems coping with day-to-day stresses. However, about half said day-to-day coping was a slight or moderate problem. A greater problem, particularly for the spouses of young enlisted personnel, was the ability to "get along" when their soldier-spouses were away. This difficulty may be quite expensive for the Army if soldiers must be removed from the field to resolve a family problem. There is also evidence that family stresses can render soldiers more vulnerable to battle shock. Gal (1986) reports that during the Yom Kippur War of 1973, 80% of the psychiatric casualties reported that they had experienced personal or family stresses just prior to or during the war.

Another area where families and military needs may conflict is in the area of expenditure of resources. According to a recent Rand report (Vernez, Meredith & Praskac, 1986), 16% of the Army's annual budget is spent on families and Quality of Life services. If these programs do not actually improve readiness, they might well be scaled back during times when resources are in short supply. However, there is elliptical mounting evidence that family programs do pay for themselves by reducing "employee" turnover, absenteeism, administrative costs, and the time managers spend on families matters. A listing of many major research efforts documenting the "cost effectiveness" of military

family programs can be found in Blankinship, Bullman, & Croan (1990).

Other research has also demonstrated "readiness benefits" for: (1) family violence programs (Blankinship, 1990b), (2) family service centers (Cavin, 1990), and (3) unit based family programs (Kirkland & Katz, 1989; Bell, 1990).

Effects on Units. Prior research in this area has not shown how families impact upon units and how the interaction can be made more beneficial to both parties.

One of the recurring myths in the Army is that dysfunctional personnel and families consume an inordinate amount of a commander's time which, in turn, has demonstrable effects on the ability of a unit to perform its mission. Although we cannot refute this notion directly, we can investigate this claim using both questionnaire and observational data from a 1979 ARI research project which examined how company leaders used their time. The researchers found that company commanders spent, on average, between 16% and 19% of their time (depending upon how time use was measured) engaged in all of the unit's personnel management activities (Johnson, Tokunaga, and Hiller, 1979). Whether the proportion of time spent on "problem" soldiers and families is still considered to be excessive is based on individual judgement. The data suggest, however, that personnel matters do not absorb an inordinate amount of a leader's time.

Kirkland & Katz (1989) reviewed a number of installation and unit programs which they believed influenced families feelings about the Army and, therefore, the extent to which they would support the unit mission and the soldier's desire to remain in service. These programs, policies, and practices include: leader responsiveness toward families with problems, having predictable work schedules, absence of mandatory social functions, allowing ample time for new families to settle in, encouraging spouses to form active Family Support groups, setting up mechanisms to quickly return soldiers from exercises in case of family emergencies, having comfortable and adequate post "guest houses," encouraging agencies that deal with families to be supportive and concerned, increasing communications between family members (irrespective of the rank of the husband) and making it easier for soldiers to use civilian medical facilities.

They then conclude:

The data available about programs for families indicated that they cost very little, and they more than pay for themselves in improved retention and reduced disciplinary and administrative costs (p. 74).

Although it is apparent that the authors are urging the Army to pay attention to the items listed above, it is not clear whether their conclusion, per se, is referring to (1) the authors' own data, (2) the findings of other WRAIR projects reviewed in the article, or (3) a USMC project which looked at the services provided by Family Service Centers. However, research conducted at WRAIR demonstrated the readiness benefits of several low cost, unit based programs: welcoming soldiers, allowing time off to secure housing, predictable duty hours and unit based family support groups (Schneider & Teitelbaum, 1989).

Effects on soldiers. Areas where family effects have been demonstrated include: (1) soldier retention, (2) showing up for duty and deployments, (3) ability to concentrate on the mission (instead of family concerns), and (4) ability to perform the mission.

(1) Soldier Retention. Spouse support for the military career has been shown to be one of the strongest and most consistent predictors of married personnel for both officers and enlisted personnel in all four branches of service (DoD Military Family Resource Center [MFRC], 1984; Orthner, 1990). Since the ability of the Army to select good unit leaders is dependent upon the quality of soldiers who are willing to remain, and since the longer one remains in service the more likely he/she is to be married, it can be argued that spouse support has a direct effect on the Army's ability to retain its quality soldiers and hence its readiness.

(2) Attendance. Pliske (1988) matched survey and personnel record data from 12,806 Army participants in the 1985 DoD Family Survey to determine how family factors affected individual soldier performance. On the basis of her re-analysis of the survey portion of her data she concluded:

...dependent care arrangements are a problem for a substantial minority of Army personnel for both short-term and long-term situations such as no-notice alerts and unit deployments. Although dependent care problems are of particular concern to single parents and dual military parents, parents married to civilian spouses also have dependent care problems (p. 28).

Similar conclusions were reached by a Rand Corporation project using a separate world-wide survey (Vernez, 1990). Although both these efforts find that single parents and dual military couples report more child care problems, WRAIR has found that these two groups can and do deploy just as frequently as others if they are members of frequently deploying units (Teitelbaum, 1990). Two interpretations of these data are possible: (1) frequently deploying units only keep those who can deploy or (2) single parents and dual military couples solve

their child care problems if they are given sufficient incentives to do so.

(3) Ability to concentrate. Pliske (1988) also looked at three behaviors that are expected to be related to married soldiers' abilities to concentrate while on deployment: (1) having a written will, (2) arranging for Power of Attorney (POA), and (3) having life insurance. Although at least 90% of the soldiers had some form of life insurance, most did not have (or were not sure they had) either wills or signed POA agreements. This was true even of those who were married and/or had children. It should be noted that lacking a will can have an effect on readiness as well. For example, it was widely reported that the American invasion of Grenada was held up for several hours while teams of lawyers called in and out of loaded airplanes assisting the soldiers in completing their wills.

(4) Ability to perform the mission. Pliske chose as her measures of soldier "readiness" two tests the Army routinely administers to enlisted soldiers: (1) a job knowledge test called the Skill Qualification Test (SQT) and (2) a test of trainability called the Armed Forces Qualification Test or AFQT (used as the general entrance test). Both tests showed that "performance" is related to marital status. The highest SQT scores were obtained by dual military soldiers and military parents who were married to civilians. Although these results are interesting, they are not conclusive since there are many non-family factors (e.g., years of service, MOS, and general mental ability) known to be related to the SQT scores which were not controlled for in this bi-variate analysis. When a more sophisticated, multi-variate analysis was conducted, the only "family" variable still associated with SQT scores was the presence of children: those who were accompanied by children had higher scores.

AFQT scores were highest among the single soldiers and the dual military soldiers who did not have children. Again, these results appear to be due to non-family factors since many of those with the highest AFQT scores joined the Army to take advantage of the "Army College Fund" and subsequently leave the army prior to getting married or having any children.

Pliske's data seems to indicate that taking a simple cross section of the Army and drawing conclusions from it is misleading. It is not being married, per se, that is causing scores to rise and fall but rather the nature of the soldiers who choose to stay and therefore become married and have children. Making the Army a good place to raise a family may motivate higher quality soldiers to stay in and therefore improve readiness.

Future analyses.

Five reports are planned for this research area during the FY91-92 time-frame. The first two will address: (1) how to best measure individual readiness and (2) what family factors are related to the developed readiness scores. Initial results indicate that the soldier measure will probably be a summary of the opinions of the first line supervisor or a combination of the opinions of the first and second line supervisor regarding how well the soldier is likely to perform in combat. It may also be desirable to add to the supervisor(s) rating two items of record data indicating how well (i.e., the presence of awards and decorations) and/or how badly (i.e., the presence of article 15s and "flag actions") the soldier has performed in the past.

The prediction of soldier readiness will not only include family factors but also other personal and unit characteristics that may prove to be relevant as well. Publication of these two reports is scheduled for September and November of 1990, respectively.

Two parallel reports are planned for unit readiness. Since the unit measures reports will incorporate what is learned from the individual analyses, they will be produced somewhat later (i.e., December, 1990 and May, 1991).

The final report in the series will take advantage of all that has been learned from the entire project to determine the most efficient predictors of individual and unit readiness and the best ways to improve these measures using advanced modeling techniques. This report is due at the end of the AFRP project: November, 1991. For more details on these and the other planned products from AFRP see Appendix D.

REFERENCES

- Barokas, J., & Croan, G. (eds.) (1988). The research plan (unpublished manuscript). Research Triangle Park, NC: Research Triangle Institute.
- Bell, D. B. (1990, February). The Army Family Research Program: Project overview. Paper presented at the DoD Military Family Research Review Conference, Andrews Air Force Base, MD.
- Bell, D. B., & Houston, T. J. (1976). The Vietnam era deserter: Characteristics of unconvicted Army deserters participating in Presidential Clemency Program (Research Problem Review 76-6). Alexandria, VA: U.S. Army Research Institute for the Behavioral and Social Sciences.
- Bell, D. B., & Iadeluca, R. B. (1987). The origins of volunteer support for Army family programs (ARI Research Report 1456). Alexandria, VA: U.S. Army Research Institute for the Behavioral and Social Sciences. (AD A190 587)
- Blankinship, D. A. (1990a). The Army Family Research Program: The role of installation leaders in creating a supportive family environment. In: D. A. Blankinship, S. L. Bullman, & G. M. Croan (eds.), The policy, program, and fiscal implications of military family research: Proceedings of the 1990 Military Family Research Review (pp. 110-128) (Contract No. MDA903-89-M-8931). Arlington, VA: Office of Assistant Secretary of Defense, Office of Family Policy and Support.
- Blankinship, D. A. (1990b). A preliminary model for estimating the cost effectiveness of family advocacy programs. In: D. A. Blankinship, S. L. Bullman, & G. M. Croan (eds.), The policy, program, and fiscal implications of military family research: Proceedings of the 1990 Military Family Research Review (pp. 65-82) (Contract No. MDA903-89-M-8931). Arlington, VA: Office of Assistant Secretary of Defense, Office of Family Policy and Support.
- Blankinship, D. A., Bullman, S. L., & Croan, G. M. (1990). Appendix A: Military Family Research Bibliography. In: D. A. Blankinship, S. L. Bullman, & G. M. Croan (eds.), The policy, program, and fiscal implications of military family research: Proceedings of the 1990 Military Family Research Review (pp. 144-152) (Contract No. MDA903-89-M-8931). Arlington, VA: Office of Assistant Secretary of Defense, Office of Family Policy and Support.

- Bowen, G. L. (1986, August). The influence of family factors on the retention decision making process of military members. Paper presented at the Annual Convention of the American Psychological Association, Washington, DC.
- Bray, R. M., & Thesen, A. C. (1988). The 1988 TPU Attritee Research Project: Tabular descriptions of the Army National Guard (PUTA Working Paper 88-11). Alexandria, VA: U.S. Army Research Institute for the Behavioral and Social Sciences.
- Bray, R. M., & Thesen, A. C. (1988). The 1988 TPU Attritee Research Project: Tabular descriptions of the U.S. Army Reserve (PUTA Working Paper 88-12). Alexandria, VA: U.S. Army Research Institute for the Behavioral and Social Sciences.
- Campbell, C. H., Campbell, R. C., Ramsberg, P., Schultz, S., Stawarski, C., & Styles, M. (1988). Model of individual and unit readiness: A review of the literature (ARI Research Note). Alexandria, VA: U.S. Army Research Institute for the Behavioral and Social Sciences.
- Cavin, E. (1990, February). Effects of family programs on retention in the Marine Corps. Paper presented at Military Family Research Review, Andrews Air Force Base, MD.
- Chief of Staff, U.S. Army (1983). White Paper 1983: The Army family. Washington, DC: Headquarters, Department of the Army.
- Croan, G. M., Bowen, G. L., Farkas, R. G., Glickman, A., Orthner, D. K., Nogami, G., Gade, P. A., & Tremble, T. R., Jr. (1987). Career decision-making and the military family: Towards a comprehensive model (unpublished manuscript). Alexandria, VA: U.S. Army Research Institute for the Behavioral and Social Sciences.
- Etheridge, R. M. (1989). Family factors affecting retention: A review of the literature (ARI Research Report 1511). Alexandria, VA: U.S. Army Research Institute for the Behavioral and Social Sciences. (AD A210 506)
- Fisher, E. F. (1885). The Army and the noncommissioned officers' families (unpublished manuscript). Washington, DC: U.S. Army Center of Military History.
- Gal, R. (1986). A portrait of the Israeli Soldier. New York: Greenwood Press.

- Griffith, J. D., Gabel, T. J., & Stewart, L. S. (1988). Annual survey of Army families: A report on Army spouses and families in 1987--Supplementary tabulations. Alexandria, VA: U.S. Army Community and Family Support Center.
- Griffith, J. D., Greenlees, J., Becraft, C., Hennessy, S., & Geleta, J. (1989a). Summary of the issues of concern to spouses of ARNG and USAR soldiers (Vol. 1) (Contract No. MDA903-88-C-0282). Alexandria, VA: U.S. Army Community and Family Support Center.
- Griffith, J. D., Greenlees, J., Becraft, C., Hennessy, S., & Geleta, J. (1989b). Tabulation of responses to surveys on Army Family Issues (Vol. 2) (Contract No. MDA903-88-C-0282). Alexandria, VA: U.S. Army Community and Family Support Center.
- Griffith, J. D., Stewart, L. S., & Cato, E. D. (1988a). Annual survey of Army families: A report on Army spouses and families in 1987--Summary report. Alexandria, VA: U.S. Army Community and Family Support Center.
- Griffith, J. D., Stewart, L. S., & Cato, E. D. (1988b). Annual survey of Army families: A report on Army spouses and families in 1987. Alexandria, VA: U.S. Army Community and Family Support Center.
- Griffith, J. D., Stewart, L. S., & Cato, E. D. (1988c). Annual survey of Army families: A report on Army spouses and families in 1987--Supplementary tabulations. Alexandria, VA: U.S. Army Community and Family Support Center.
- Johnson, C. A., Tokunaga, H. T., & Hiller, J. (1979). Validation of a job analysis questionnaire through intensive observation (unpublished manuscript). Monterey, CA: U.S. Army Research Institute for the Behavioral and Social Sciences Presidio of Monterey Field Unit.
- Johnson, D. C., Cory, B. H., Day, R. W., & Oliver, L. W. (1978). Women content in the Army. REFORGER 77 (REF WAC) (Special Report S-7). Alexandria, VA: U.S. Army Research Institute for the Behavioral and Social Sciences. (AD A055 960)
- Kirkland, F. R., & Katz, P. (1989). Combat readiness and the Army family. Military Review, April, 63-74.
- Kralj, M. M., Sadacca, R., Griffith, J. D., & Ostrove, N. M. (1991). USAREUR Personnel Opinion Survey: A report on family issues (ARI Research Note 91-23). Alexandria, VA: U.S. Army Research Institute for the Behavioral and Social Sciences. (AD B152 789)

- Lakhani, H., Gade, P., & Nogami, G. Y. (1987). The effect of transferability of GI Bill educational benefits for family members of retention and career choice (ARI Technical Report 772). Alexandria, VA: U.S. Army Research Institute for the Behavioral and Social Sciences. (AD A191 694)
- McCalla, M. E., Rakoff, S. H., Doering, A. D., & Mahoney, B. S. (1986). Description of officers and enlisted personnel in the U.S. Armed Forces: 1985. Arlington, VA: Defense Manpower Data Center.
- Military Family Resource Center. (1984). Review of Military Family Research and Literature. Washington, DC: Office of the Assistant Secretary of Defense.
- Nogami, G. Y., & Urgan, D. (1986). Military Housing in USAREUR: Stairwell Living (PUTA Working Paper 86-21). Alexandria, VA: U.S. Army Institute for the Behavioral and Social Sciences.
- Office of the Deputy Chief of Staff for Personnel. (1984). The Army Family Action Plan. Washington, DC: Community and Family Policy Division, Human Resources Development Directorate, Office of the Deputy Chief of Staff for Personnel.
- Oliver, L. W. (1990, February). The relationship of family factors to readiness: What we know, what we need to know, and what we can tell policy makers. Paper presented at the DoD Military Family Review Conference, Andrews Air Force Base, MD.
- O'Mara, F. E. (1989). The relationship of training and personnel factors with combat performance (ARI Research Note 89-18). Alexandria, VA: U.S. Army Research Institute for the Behavioral and Social Sciences. (AD A209 945)
- Orthner, D. K. (1990). Family impacts on the retention of military personnel. In: D. A. Blankinship, S. L. Bullman, & G. M. Croan (eds.), The policy, program, and fiscal implications of military family research: Proceedings of the 1990 Military Family Research Review (pp. 82-98) (Contract No. MDA903-89-M-8931). Arlington, VA: Office of Assistant Secretary of Defense, Office of Family Policy and Support.

- Orthner, D. K., & Bowen, G. L. (1990). Family adaptation in the military. In: D. A. Blankinship, S. L. Bullman, & G. M. Croan (eds.), The policy, program, and fiscal implications of military family research: Proceedings of the 1990 Military Family Research Review (pp. 21-46) (Contract No. MDA903-89-M-8931). Arlington, VA: Office of Assistant Secretary of Defense, Office of Family Policy and Support.
- Orthner, D. K., & Bowen, G. L. (In preparation). Young single soldiers and relationships (ARI Technical Report). Alexandria, VA: U.S. Army Research Institute for the Behavioral and Social Sciences.
- Orthner, D. K., Early-Adams, P., Deval, E., Giddings, M., Morley, R., & Stawarski, C. (1987). Community satisfaction and support programs: Review of the literature. Alexandria, VA: U.S. Army Research Institute for the Behavioral and Social Sciences.
- Orthner, D. K., Zimmerman, L., & Bowen, G. L. (In preparation). Development of a measure of family adaptation to the Army (ARI Technical Report 925). Alexandria, VA: U.S. Army Research Institute for the Behavioral and Social Sciences.
- Patton, J. H. (1980). Community Service: Another kind of Volunteer Army. Volunteer Administration, Summer.
- Pliske, B. (1988). Families and readiness: An examination of the 1985 DoD survey of enlisted personnel (ARI Research Report 1490). Alexandria, VA: U.S. Army Research Institute for the Behavioral and Social Sciences. (AD A203 166)
- Rakoff, S. H., & Doherty, J. H. (1989). Army family composition and retention (ARI Research Report 1535). Alexandria, VA: U.S. Army Research Institute for the Behavioral and Social Sciences. (AD A212 880)
- Research Triangle Institute. (1990). The Army Family Research Program: First annual work plan (ARI Research Note 90-108). Alexandria, VA: U.S. Army Research Institute for the Behavioral and Social Sciences. (AD A226 140)
- Research Triangle Institute. (1989a). Preliminary analysis plan: January 12, 1989 (unpublished manuscript). Research Triangle Park, NC: Research Triangle Institute.
- Research Triangle Institute. (1989b). 1989 Installation Project Officers' Manual (unpublished manuscript). Research Triangle Park, NC: Research Triangle Institute.

Research Triangle Institute. (1990). AFRP Analysis Plan (0005AK) (Vols. 1 & 2) (Contract No. MDA903-87-C-0540). Research Triangle Park, NC: Research Triangle Institute.

Saynish, C. (1980). Stair wars: Stairwells with their lack of privacy make for uptight living. Off Duty/Europe, pp. 22A-24A.

Scarville, J. (1990). Spouse employment in the Army: A summary of research findings. In: D. A. Blankinship, S. L. Bullman, & G. M. Croan (eds.), The policy, program, and fiscal implications of military family research: Proceedings of the 1990 Military Family Research Review (pp. 47-64) (Contract No. MDA903-89-M-8931). Arlington, VA: Office of Assistant Secretary of Defense, Office of Family Policy and Support.

Schneider, R. J., & Teitelbaum, J. M. (1989)., Research progress: Report to the Community and Family Support Center. Washington, DC: Department of Military Psychiatry, Walter Reed Army Institute of Research.

Schreiber, E. M., & Woelfel, J. C. (1979). Effects of women on group performance in a traditionally male occupation: The case of the U.S. Army. Journal of Political and Military Sociology, 7, 121-134.

Segal, M. W. (1986). Plan for research on Army families (ARI Research Product 86-30). Alexandria, VA: U.S. Army Research Institute for the Behavioral and Social Sciences. (AD A175 576)

Smith, A. L., Jr. (1988). A multivariate analysis of determinants of reenlistment: A decision-making model for enlisted personnel (ARI Technical Report 797). Alexandria, VA: U.S. Army Research Institute for the Behavioral and Social Sciences. (AD A199 083)

Sorely, L. (1980). Prevailing criteria: A critique. In: S. Sarkesian (ed.), Combat effectiveness. Beverly Hills, CA: Sage, pp. 57-93.

Sweeney, T. J., Connelly, D. W., Dunn, L. F., Ghazalah, I., & Burdick, W. L. (1989). Annual Report 1988 Survey: Longitudinal Research on Officer Careers (Contract MDA903-88-C-0121). Alexandria, VA: Automation Research Systems, Limited.

- Teitelbaum, J. M. (1990). Effective family supportiveness. In: D. A. Blankinship, S. L. Bullman, & G. M. Croan (eds.), The policy, program, and fiscal implications of military family research: Proceedings of the 1990 Military Family Research Review (pp. 110-128) (Contract No. MDA903-89-M-8931). Arlington, VA: Office of Assistant Secretary of Defense, Office of Family Policy and Support.
- Teplitzky, M. L., Hedlund, M., & Nogami, G. (1987). Case studies of officer and enlisted single parents in the Army: Performance, retention, and quality of life (ARI Technical Report 749). Alexandria, VA: U.S. Army Research Institute for the Behavioral and Social Sciences. (AD A190 581)
- Teplitzky, M. L. (1988a). Dual Army career couples: Factors related to the career intentions of men and women (ARI Technical Report 804). Alexandria, VA: U.S. Army Research Institute for the Behavioral and Social Sciences. (AD A199 289)
- Teplitzky, M. L. (1988b). The effects of work on families (PUTA Working Paper). Alexandria, VA: U.S. Army Research Institute for the Behavioral and Social Sciences.
- Teplitzky, M. L., Thomas, S. A., & Nogami, G. Y. (1988). Dual Army career officers: Job attitudes and career intentions of male and female officers (ARI Technical Report 805). Alexandria, VA: U.S. Army Research Institute for the Behavioral and Social Sciences. (AD A199 071)
- U.S. Army Research Institute. (1977). Women-content-in-units force development test (MAX WAC) (Special Report S-6). Alexandria, VA. (AD A764 510)
- U.S. Army Research Institute. (1981). Unit performance seminar 6-8 October 1981--Summary of proceedings. Alexandria, VA: Author.
- Vernez, G. (1990, February). Enhancing the effectiveness of Army family programs. Paper presented at Military Family Research Review, Andrews Air Force Base, MD.
- Vernez, G., Meredith, L., & Praskac, A. M. (1986)., A guide to Army quality-of-life and family support programs (unpublished manuscript). Santa Monica, CA: Rand.
- Vernez, G., & Zellman, G. L. (1987). Families and mission: A review of the effects of family factors on Army attrition, retention, and readiness. Santa Monica, CA: Rand.
- Vuono, C. E. (1990). A strategic force for the 1990s and beyond. Washington, DC: Office of the Chief of Staff of the Army.

APPENDIX A

ARI IN-HOUSE ARMY FAMILY PRODUCTS (Not part of the Army Family Research Program)

- Gade, P. A., Eaton, N. K., & Bauman, R. (1988). The impact of spouse employment on military manpower. In: A.C.F. Gilbert (ed.), Proceedings of the 30th Annual Conference of the Military Testing Association (pp. 225-230). Alexandria, VA: U.S. Army Research Institute for the Behavioral and Social Sciences.
- Lakhani, H. A. (1987, March). The effect of proposed transferability of GI Bill educational benefits on Army retention. Paper presented at the Atlantic Economic Conference, Philadelphia, PA.
- Lakhani, H. A. (1988). Career decisions of dual career couples: An interdisciplinary analysis in the U.S. Army (ARI Technical Report 824). Alexandria, VA: U.S. Army Research Institute for the Behavioral and Social Sciences. (AD A206 983)
- Lakhani, H. A. (1988, June). The determinants of job satisfaction in Army Reserve/National Guard units: An interdisciplinary analysis. Paper presented at the Annual Conference of the Society for Behavioral Economics, San Diego, CA.
- Lakhani, H. A. (1988). The determinants of satisfaction with family life: An interdisciplinary analysis (ARI Technical Report 800). Alexandria, VA: U.S. Army Research Institute for the Behavioral and Social Sciences. (AD A200 691)
- Lakhani, H. A. (1989). The determinants of job satisfaction: A multidisciplinary, multivariate analysis of the U.S. Army (ARI Technical Report 830). Alexandria, VA: U.S. Army Research Institute for the Behavioral and Social Sciences. (AD A209 143)
- Lakhani, H. A. (1989). The determinants of satisfaction with family life: An interdisciplinary analysis of the U.S. Army. In: T. J. Kozik, & D. G. Jansson (eds.), The worker in transition: Technological change. New York: The American Society of Mechanical Engineers.
- Lakhani, H. A. (1990). Effect of perceptions of leadership performance on Army unit performance. Paper to be presented at the 33rd Annual Conference of the Military Testing Association, Orange Beach, CA.

- Lakhani, H. A. (1990). The interdependence of self-reported estimates of individual and unit readiness of junior Army officers. Manuscript submitted for publication.
- Lakhani, H. A. (In preparation). The determinants of job satisfaction in the U.S. Army Reserve (ARI Research Note). Alexandria, VA: U.S. Army Research Institute for the Behavioral and Social Sciences.
- Lakhani, H. A. (In preparation). The determinants of job satisfaction in the U.S. Army Reserve/National Guard (ARI Technical Report 907). In: R. Frantz, J. Gerber, & H. Singh (eds.), Handbook of Behavioral Economics Vol. II. Greenwich, CT: JAI. (AD A229 014)
- Lakhani, H. A. (In preparation). The interdependence of self-reported estimates of individual and unit performance (ARI Research Report 1567). Alexandria, VA: U.S. Army Research Institute for the Behavioral and Social Sciences. (AD A226 447)
- Lakhani, H. A., & Gade, P. A. (1990, July). Career decisions of dual career couples: A multidisciplinary analysis. Paper to be presented at the Annual Conference of the Western Economics Association, San Diego, CA.
- Lakhani, H. A., Gade, P. A., & Nogami, G. Y. (1987). The effect of transferability of GI Bill educational benefits for family members on retention and career choice (ARI Technical Report 772). Alexandria, VA: U.S. Army Research Institute for the Behavioral and Social Sciences. (AD A191 694)
- Lakhani, H. A., & Lal, R. (1988). Cost-effectiveness of retention of Army West Point officers. In: A.C.F. Gilbert (ed.), Proceedings of the 30th Annual Conference of the Military Testing Association (pp. 147-152). Alexandria, VA: U.S. Army Research Institute for the Behavioral and Social Sciences.
- Lakhani, H. A., & Lal, R. (1989, March). Retention of young professionals: An interdisciplinary analysis. Paper presented at the Atlantic Economics Conference, Barcelona, Spain.
- Lakhani, H. A., Thomas, S., & Gilroy, C. (1985). Army European tour extension: A multivariate approach. The Journal of Behavioral Economics, 14, 15-41.

- Lal, R., & Lakhani, H. A. (In preparation). A model of employment decision-making: An analysis of quit/stay (ARI Research Note 90-60). Alexandria, VA: U.S. Army Research Institute for the Behavioral and Social Sciences. (AD A226 881)
- Nogami, G. Y., & Horne, D. K. (1988). Perspectives on reserve attrition (ARI Research Report 1499). Alexandria, VA: U.S. Army Research Institute for the Behavioral and Social Sciences. (AD A206 333)
- Ozkaptan, H., Sanders, W., & Holz, R. (1986). A profile of Army families in USAREUR: Results of the 1983 Families in Europe Survey (ARI Research Report 1428). Alexandria, VA: U.S. Army Research Institute for the Behavioral and Social Sciences. (AD A175 454)
- Pliske, R. (1988). Families and readiness: An examination of the 1985 DoD Survey of Enlisted Personnel (ARI Research Report 1490). Alexandria, VA: U.S. Army Research Institute for the Behavioral and Social Sciences. (AD A203 166)
- Smith, A. L., Jr. (1988). A multivariate analysis of determinants of reenlistment: A decision-making model for enlisted personnel (ARI Technical Report 797). Alexandria, VA: U.S. Army Research Institute for the Behavioral and Social Sciences. (AD A199 083)
- Smith, A. L., Jr. (1988). Contributions of spouse related factors affecting reenlistment for enlisted personnel. In: A.C.F. Gilbert (ed.), Proceedings of the 30th Annual Conference of the Military Testing Association (pp. 231-236). Alexandria, VA: U.S. Army Research Institute for the Behavioral and Social Sciences.
- Teplitzky, M. L. (1988). Dual Army career couples: Factors related to the career intentions of men and women (ARI Technical Report 804). Alexandria, VA: U.S. Army Research Institute for the Behavioral and Social Sciences. (AD A199 289)
- Teplitzky, M. L. (1988). The effects of work on family: A review and analysis of the literature (ARI Technical Report 801). Alexandria, VA: U.S. Army Research Institute for the Behavioral and Social Sciences. (AD A198 936)
- Teplitzky, M. L., Hedlund, M., & Nogami, G. (1987). Case studies of officer and enlisted single parents in the Army: Performance, retention, and quality of life (ARI Technical Report 749). Alexandria, VA: U.S. Army Research Institute for the Behavioral and Social Sciences. (AD A190 581)

Teplitzky, M. L., Thomas, S., & Nogami, G. (1988). Dual Army career officers: Job attitudes and career intentions of male and female officers (ARI Technical Report 805). Alexandria, VA: U.S. Army Research Institute for the Behavioral and Social Sciences. (AD A199 071)

APPENDIX B

ARMY FAMILY RESEARCH PROGRAM (AFRP)

Publications and Conference Presentations

- Barokas, J., & Croan, G. (eds.). (In preparation). The research plan (ARI Research Note). Alexandria, VA: U.S. Army Research Institute for the Behavioral and Social Sciences.
- Bell, D. B. (1990, February). The Army Family Research Program: An overview. Paper presented at the Military Family Research Review, Andrews Air Force Base, MD.
- Bell, D. B. (In preparation). The Army Family Research Program: An overview (ARI Research Report). Alexandria, VA: U.S. Army Research Institute for the Behavioral and Social Sciences.
- Bell, D. B., & Iadeluca, R. B. (1987). The origin of volunteer support for Army family programs (ARI Research Report 1456). Alexandria, VA: U.S. Army Research Institute for the Behavioral and Social Sciences. (AD A190 587)
- Blankinship, D. (1990, February). The Army Family Research Program: Army families and installation leaders. Paper presented at the Military Family Research Review, Andrews Air Force Base, MD.
- Blankinship, D. (1990). The Army Family Research Program: Army families and installation leaders (ARI Research Report 1558). Alexandria, VA: U.S. Army Research Institute for the Behavioral and Social Sciences. (AD A223 799)
- Bowen, G. L. (1986, August). The influence of family factors on the retention decision making process of military members. Paper presented at the Annual Convention of the American Psychological Association, Washington, DC.
- Bowen, G. L. (1989). Family adaptation to relocation: An empirical analysis of family stressors, adaptive resources, and sense of coherence (ARI Technical Report 856). Alexandria, VA: U.S. Army Research Institute for the Behavioral and Social Sciences. (AD A212 805)
- Bowen, G. L. (1989). Satisfaction with family life in the military. Armed Forces and Society, 15, 571-592.

- Bowen, G. L. (1989). The relationship of satisfaction with the environment for families to satisfaction to soldiers' satisfaction with the military way of life (ARI Technical Report 864). Alexandria, VA: U.S. Army Research Institute for the Behavioral and Social Sciences. (AD A219 901)
- Bowen, G. L. (1990). The family adaptation model: A life course perspective (ARI Technical Report 880). Alexandria, VA: U.S. Army Research Institute for the Behavioral and Social Sciences. (AD A221 058)
- Bowen, G. L. (1990). Identification of strong/well families and how to support them (ARI Research Note 90-69). Alexandria, VA: U.S. Army Research Institute for the Behavioral and Social Sciences. (AD A225 740)
- Bowen, G. L. (1990). The influence of family factors on the retention decision making process of military members (ARI Research Note 90-111). Alexandria, VA: U.S. Army Research Institute for the Behavioral and Social Sciences. (AD A226 948)
- Bowen, G. L., & Neenan, P. A. (1989). Organizational attitude toward families and satisfaction with the military as a way of life: Perceptions of civilian spouses of U.S. Army members. Family Perspective, 23, 3-13.
- Bowen, G. L., & Neenan, P. A. (1990). The relationship between the perceived level of organizational support for families and spouse satisfaction with the military way of life (ARI Technical Report 874). Alexandria, VA: U.S. Army Research Institute for the Behavioral and Social Sciences. (AD A219 925)
- Braddy, B. A. (1990). Exploratory discussion of spouse employment issues (ARI Research Product 90-06). Alexandria, VA: U.S. Army Research Institute for the Behavioral and Social Sciences. (AD A219 902)
- Bray, R. M., & Thesen, A. C. (1990). The 1988 Troop Program Unit Attritee Research Project: Tabular descriptions of the Army National Guard (ARI Research Product 90-17). Alexandria, VA: U.S. Army Research Institute for the Behavioral and Social Sciences. (AD A223 225)
- Bray, R. M., & Thesen, A. C. (1990). The 1988 Troop Program Unit Attritee Research Project: Tabular descriptions of the U.S. Army Reserve (ARI Research Product 90-18). Alexandria, VA: U.S. Army Research Institute for the Behavioral and Social Sciences. (AD A223 730)

- Caliber Associates. (1990). Family adaptation: Second annual in process review (ARI Research Note 90-20). Alexandria, VA: U.S. Army Research Institute for the Behavioral and Social Sciences. (AD A223 260)
- Campbell, C. H., Campbell, R. C., Ramsberg, P., Schultz, S., Stawarski, C., & Styles, M. (1991). A model of family factors and individual and unit readiness: A review of the literature (ARI Research Note 91-30). Alexandria, VA: U.S. Army Research Institute for the Behavioral and Social Sciences. (AD A232 705)
- Coolbaugh, K., Perrine, H., & Griffith, J. D. (1990). Spouse employment user summary (ARI Research Note 90-98). Alexandria, VA: U.S. Army Research Institute for the Behavioral and Social Sciences. (AD A226 877)
- Croan, G. M., Bowen, G. L., Farkas, R. G., Glickman, A., Orthner, D. K., Nogami, G., Gade, P. A., & Tremble, T. R., Jr. (In preparation). Career decision-making and the military family: Towards a comprehensive model (ARI Research Note 90-17). Alexandria, VA: U.S. Army Research Institute for the Behavioral and Social Sciences. (AD A223 225)
- Cruze, A. M. (ed.). (1990). The Army Family Research Program: Second Annual Work Plan (ARI Research Note 90-103). Alexandria, VA: U.S. Army Research Institute for the Behavioral and Social Sciences. (AD A226 891)
- Dunteman, G. H., Bray, R. M., Wood, L., Griffith, J. D., & Ostrove, N. M. (In preparation). Exploratory models of reenlistment intentions from the 1985 DoD Survey of enlisted personnel (ARI Research Note 90-134). Alexandria, VA: U.S. Army Research Institute for the Behavioral and Social Sciences. (AD A228 049)
- Etheridge, R. M. (1989). Family factors affecting retention: A review of the literature (ARI Research Report 1511). Alexandria, VA: U.S. Army Research Institute for the Behavioral and Social Sciences. (AD A210 506)
- Griffith, J. D., Stewart, L. S., & Cato, E. D. (1988). Annual survey of Army families: A report on Army spouses and families in 1987 (Vols. 1-3). Alexandria, VA: U.S. Army Community and Family Support Center.
- Hogan, P. F. (1990). Family annualized cost of leaving (ACOL): The household as the decision unit military retention (ARI Technical Report 890). Alexandria, VA: U.S. Army Research Institute for the Behavioral and Social Sciences. (AD A224 394)

- Houston, J. S. (1990). Pretesting and revision of survey of advanced individual training graduates (ARI Research Note 90-97). Alexandria, VA: U.S. Army Research Institute for the Behavioral and Social Sciences. (AD A226 874)
- Iannacchione, V. G. (1990). The Army Family Research Program: Sampling plan for the core research effort (ARI Research Note 90-64). Alexandria, VA: U.S. Army Research Institute for the Behavioral and Social Sciences. (AD A227 580)
- Janofsky, B. J. (1990). Dual-military enlisted couples (ARI Research Note 90-101). Alexandria, VA: U.S. Army Research Institute for the Behavioral and Social Sciences. AD B148 733)
- Kralj, M. M., Sadacca, R., Campbell, C. H., & Kimmel, M. (In preparation). Definition and measures of individual and unit readiness and family phenomena affecting it (ARI Research Note). Alexandria, VA: U.S. Army Research Institute for the Behavioral and Social Sciences.
- Kralj, M. M., Sadacca, R., Stawarski, C., & Kimmel, M. (In preparation). USAREUR Personnel Opinion Survey: A report on family issues (ARI Research Note). Alexandria, VA: U.S. Army Research Institute for the Behavioral and Social Sciences.
- Lakhani, H. A., & Gilbert, A.C.F. (1990). Duration time analysis of spouse employment in the U.S. Army (ARI Research Note 90-95). Alexandria, VA: U.S. Army Research Institute for the Behavioral and Social Sciences. (AD A228 329)
- Oliver, L. (1990, February). The relationship of family factors to readiness: What we know, what we need to know, and what we can tell policy makers. Paper presented at the Military Family Research Review, Andrews Air Force Base, MD.
- Oliver, L. (1991). Readiness and family factors: Findings and implications from the literature (ARI Research Report 1582). Alexandria, VA: U.S. Army Research Institute for the Behavioral and Social Sciences. (AD A234 291)
- Orthner, D. K. (1990, February). Family impacts on the retention of military personnel. Paper presented at the Military Family Research Review, Andrews Air Force Base, MD.
- Orthner, D. K. (1990). Family impacts on the retention of military personnel (ARI Research Report 1556). Alexandria, VA: U.S. Army Research Institute for the Behavioral and Social Sciences. (AD A225 084)

- Orthner, D. K., & Bowen, G. L. (1990, February). Family adaptation among military personnel and families. Paper presented at the Military Family Research Review, Andrews Air Force Base, MD.
- Orthner, D. K., & Bowen, G. L. (In preparation). Family adaptation in the military (ARI Research Report 1559). Alexandria, VA: U.S. Army Research Institute for the Behavioral and Social Sciences. (AD A225 085)
- Orthner, D. K., Devall, E., & Stawarski, C. A. (1990). Community satisfaction: Implications for Army communities (ARI Research Note 90-96). Alexandria, VA: U.S. Army Research Institute for the Behavioral and Social Sciences. (AD A226 878)
- Orthner, D. K., Pollock, D., Early-Adams, P., Giddings, M., & Morley, R. (In preparation). Building strong Army communities (ARI Research Note 90-110). Alexandria, VA: U.S. Army Research Institute for the Behavioral and Social Sciences. (AD A227 866)
- Orthner, D. K., Early-Adams, P., & Pollock, D. (1990). Community support programs: A review of the literature (ARI Research Note 90-125). Alexandria, VA: U.S. Army Research Institute for the Behavioral and Social Sciences. (AD A227 550)
- Perrine, H. S. (1990). Results of the analysis of the ACS Family Member Employment Assistance Program: CONUS sites (ARI Research Note 90-26). Alexandria, VA: U.S. Army Research Institute for the Behavioral and Social Sciences. (AD A222 439)
- Pollock, D., & Brown, A. (1991). Inventory of community satisfaction and support program measures (ARI Research Note). Alexandria, VA: U.S. Army Research Institute for the Behavioral and Social Sciences. (AD A232 974)
- Rakoff, S. H., & Doherty, J. H. (1989). Army family composition and retention (ARI Research Report 1535). Alexandria, VA: U.S. Army Research Institute for the Behavioral and Social Sciences. (AD A212 880)
- Research Triangle Institute. (In preparation). Army Family Research Program data sources (6 volumes) (ARI Research Note). Alexandria, VA: U.S. Army Research Institute for the Behavioral and Social Sciences.

- Research Triangle Institute. (1990). Army spouse employment literature review (ARI Research Note 90-124). Alexandria, VA: U.S. Army Research Institute for the Behavioral and Social Sciences. (AD A226 885)
- Research Triangle Institute. (In preparation). Description of spouses of active duty officers and enlisted personnel in the U.S. Army: 1987 (ARI Research Note). Alexandria, VA: U.S. Army Research Institute for the Behavioral and Social Sciences.
- Research Triangle Institute. (1990). Family factors and retention: First annual in process review (ARI Research Note 90-25). Alexandria, VA: U.S. Army Research Institute for the Behavioral and Social Sciences. (AD A224 932)
- Research Triangle Institute. (1990). Family factors and retention: Second annual in process review (ARI Research Note 90-27). Alexandria, VA: U.S. Army Research Institute for the Behavioral and Social Sciences. (AD A222 440)
- Research Triangle Institute. (1990). Spouse employment: First annual in process review (ARI Research Note 90-18). Alexandria, VA: U.S. Army Research Institute for the Behavioral and Social Sciences. (AD A223 730)
- Research Triangle Institute. (In preparation). The Army Family Research Program: First annual work plan (ARI Research Note). Alexandria, VA: U.S. Army Research Institute for the Behavioral and Social Sciences.
- Research Triangle Institute. (1990). The Army Family Research Program: Program development increment package defense information and General Officer Steering Committee materials (ARI Research Note 90-102). Alexandria, VA: U.S. Army Research Institute for the Behavioral and Social Sciences. (AD A226 889)
- Sadacca, R. (1990). The Family Research Program and the Selection and Classification Project data base (ARI Research Note 90-108). Alexandria, VA: U.S. Army Research Institute for the Behavioral and Social Sciences. (AD A226 140)
- Scarville, J. (1990, February). Spouse employment in the Army. Paper presented at the Military Family Research Review, Andrews Air Force Base, MD.
- Scarville, J. (1990). Spouse employment in the Army (ARI Research Report 1555). Alexandria, VA: U.S. Army Research Institute for the Behavioral and Social Sciences. (AD A222 135)

- Schwartz, J. B. (1990). Labor force participation, employment, and earnings of married women: A comparison of military and civilian wives (ARI Research Note 90-67). Alexandria, VA: U.S. Army Research Institute for the Behavioral and Social Sciences. (AD A226 270)
- Schwartz, J. B., Griffith, J. D., & Wood, L. (1990). Employment status of Army spouses (ARI Research Note 90-61). Alexandria, VA: U.S. Army Research Institute for the Behavioral and Social Sciences. (AD A226 880)
- Schwartz, J. B., Wood, L., & Griffith, J. (1990). The impact of military life on spouse labor force outcomes (ARI Research Note 90-21). Alexandria, VA: U.S. Army Research Institute for the Behavioral and Social Sciences. (AD A224 934)
- Schwartz, J. B., Wood, L., & Griffith, J. (In preparation). The impact of military life on spouse labor force outcomes. Armed Forces and Society.
- Segal, M. W. (1986). Plan for research on Army families (ARI Research Product 86-30). Alexandria, VA: U.S. Army Research Institute for the Behavioral and Social Sciences. (AD A175 576)
- Segal, M. W. (In preparation). The Army Family Research Program: First meeting of the Scientific Advisory Committee (ARI Research Note 90-19). Alexandria, VA: U.S. Army Research Institute for the Behavioral and Social Sciences. (AD A222 441)
- Segal, M. W. (In preparation). The Army Family Research Program: Second meeting of the Scientific Advisory Committee (ARI Research Note 90-23). Alexandria, VA: U.S. Army Research Institute for the Behavioral and Social Sciences. (AD A222 442).
- Styles, M. B., Janofsky, B. J., Blankinship, D., & Bishop, S. (1990). Investigating family adaptation to Army life: Exploratory site visit findings (ARI Research Note 90-15). Alexandria, VA: U.S. Army Research Institute for the Behavioral and Social Sciences. (AD A219 968)
- Tankersley, M., Coolbaugh, K., & Barokas, J. (In preparation). Army family policy and practices: A summary of regulations, letters, pamphlets, and circulars which impact on Army families (ARI Research Note 90-22). Alexandria, VA: U.S. Army Research Institute for the Behavioral and Social Sciences. (AD A223 265)

Wood, L. (1988, October). Family economics and the retention intentions of Army enlisted personnel. Paper presented at the ORSA-TIMS Annual Convention, Denver, Colorado.

Wood, L. (1990). Family economics and the retention intentions of Army enlisted personnel (ARI Research Note 90-68). Alexandria, VA: U.S. Army Research Institute for the Behavioral and Social Sciences. (AD A226 448)

APPENDIX C

DATA COLLECTION PROCEDURE

Complete details on the survey construction and sample selection can be found in the "Preliminary Analysis Plan" (Research Triangle Institute, 1989) and the "AFRP Analysis Plan", Volume I (Research Triangle Institute, 1990). The survey instruments can be found in "AFRP Analysis Plan", Volume II, Appendix A (Research Triangle Institute, 1990).

The purpose of the data collection procedure was to obtain sufficient numbers of soldiers and their spouses, company sized units, and installations to make scientifically credible statements regarding the influence of family factors on the Army and the influence of the Army on families.

To obtain sufficient numbers of some relatively rare families such as married field grade female officers, we over sampled females, officers, and married soldiers. Therefore, a greater proportion of respondents from these groups is included in the sample than would have occurred if a simple random sampling procedure had been used.

Subjects.

U. S. Army Personnel on active duty during February 1989 to December 1989 who were in paygrade levels E2 through O6; not AWOL, hospitalized, incarcerated, or detached from their units; assigned for at least 3 months to a nonclassified operational unit with 21 or more active duty Army personnel; and stationed at or within 50 miles of an installation where 1,000 or more active-duty personnel were assigned participated. The sample population was drawn from the following MACOMs: FORSCOM, WESTCOM, TRADOC, USAREUR, SOUTHCOM, 8th ARMY, and the HSC.

Sampling.

Researchers implemented a three stage, cluster, sampling procedure to choose the final sample. During stage one a sample of installations was drawn. During stages two and three samples of company sized units and soldiers within the selected units were selected, respectively. See Figure 1 for a summary of the sample design.

The sample of geographic locations was selected in September 1988. The stage two selection of units was drawn in November 1988, and the third-stage soldier and spouse sample was selected between December 1988 and March 1989. Because of their importance to the unit-level analyses, the commanders of all selected units were included in the sample.

Figure C.1

Summary of the Sample Design

First Stage

| | |
|-----------------------|--|
| Sampling Units: | Posts/installations/sites |
| Stratification: | Geographic region |
| Allocation to Strata: | Proportional to composite number of persons |
| Type of Selection: | PPS to composite number of persons |
| Sample Size: | 43 selections from 34 geographic locations ³ |

Second Stage

| | |
|-----------------------|---------------------------------------|
| Sampling Units: | Army organizational units |
| Stratification: | Unit function |
| Allocation to Strata: | Oversample deployable units |
| Type of Selection: | PPS to composite number of persons |
| Sample Size: | 542 eligible units |

Third Stage

| | |
|-----------------------|--|
| Sampling Units: | Soldiers and spouses of soldiers |
| Stratification: | Pay grade, gender, and marital status |
| Allocation to Strata: | Oversample officers, marrieds, and females |
| Type of Selection: | Simple random sample |
| Sample Size: | 14,371 eligible soldiers in participating units and spouses of married soldiers |

PPS = Probability proportional to size.

³. Multiple first-stage selections were made at large installations.

Once installations, units within installations, and the soldiers within the units were identified, lists of sampled soldiers were generated. The soldier sample for each site was drawn from Army personnel records approximately 85 days prior to data collection.

The 85-day period allowed the disposition forms (DFs) listing all soldiers by unit, to be prepared. The DFs were distributed to the units, where they were checked for accuracy and each soldier's first- and second-line supervisor were designated. Soldiers were then assigned to a supervisor who could complete readiness rating questions for them. The assignment process assured that no supervisor rated more than eight soldiers.

Soldiers who were not supervisors of any other sampled soldier received the Soldier Questionnaire. The Soldier Questionnaire contained a Unit Readiness Rating component. Soldiers who were the designated supervisor of one or more sampled soldiers but were not within the Soldier sample were given Individual Readiness Rating (IRR) Questionnaires and Unit Readiness Rating (URR) Questionnaires. Supervisors who were in the soldier sample received the Soldier Questionnaire and the Individual Readiness Rating Questionnaire. The Unit Commander received the Unit Information Form (UIF). If the commander was also a sampled soldier and/or identified as the supervisor of any sampled soldiers, the commander also received the Soldier Questionnaire and/or the Individual Readiness Rating Questionnaire.

The soldier survey was administered in group sessions at the installations by trained data collection teams. These teams also administered the questionnaires to the soldiers' designated supervisors and unit commanders. While the survey team was at the installation, the designated project liaison completed the Installation and Community Characteristics Inventory (ICCI) and obtained completed Survey of Family Services (SFS) forms from the appropriate service directors.

Married soldiers, who completed the Soldier Questionnaire, were asked to provide their spouses names and mailing addresses. Spouses completed and returned the survey by mail. A maximum of four attempts were made to have spouses return completed questionnaires.

Due to the delay between sample selection and field data collection approximately 28% of the soldiers sampled were excluded because they were no longer eligible at the time the data was collected. Of these, 72% had been reassigned, 24% had separated from the Army, and the remainder were ineligible for other reasons. Therefore, the sample represents a smaller proportion of the Army than originally designed.

Seventy-seven percent (11,035/14,371) of eligible soldiers provided a usable questionnaire. IRR data were provided for 88% of the soldiers with usable questionnaires. Fifty-two percent of the spouses responded.

Thirty-eight percent of installations/sites have a completed Installation and Community Characteristics Inventory (ICCI). Eight-three percent of installations/sites have one or more SFSS completed yielding a total of 789 SFSS. Seventy-one percent of the Unit Information forms (UIF) were completed and over 19,347 URRs were completed.

Survey Instruments.

Data were linked for soldiers, families, units, and installations. See Figure C.2 for survey instruments.

Individual- and family-level data

Soldier and spouse data were obtained from the following sources:

- * Soldier performance and readiness: (1) first-and second line supervisor ratings of soldier readiness and performance; (2) the unit commander's assessment of the soldier's performance; (3) personnel file and other data obtained from the EMF/OMF or from the soldier's self-report; (4) soldier self-report of performance (e.g., time missed from work); and (5) soldier self-assessments of performance and readiness (e.g., readiness to perform wartime job under different wartime conditions);
- * Soldier background/characteristics: (1) soldier self-report; and (2) the Army enlisted and officer master files (EMF/OMF);
- * Soldier retention: (1) soldier retention plans and reasons for the retention decisions obtained from the soldier; and (2) retention behavior obtained from the EMF/OMF at a later date;
- * Soldier experience of Army life and work, family characteristics, family life experiences, perceptions of Army and civilian life alternatives, and other experience, behavior, and attitude data: self-report;

SURVEY INSTRUMENTS

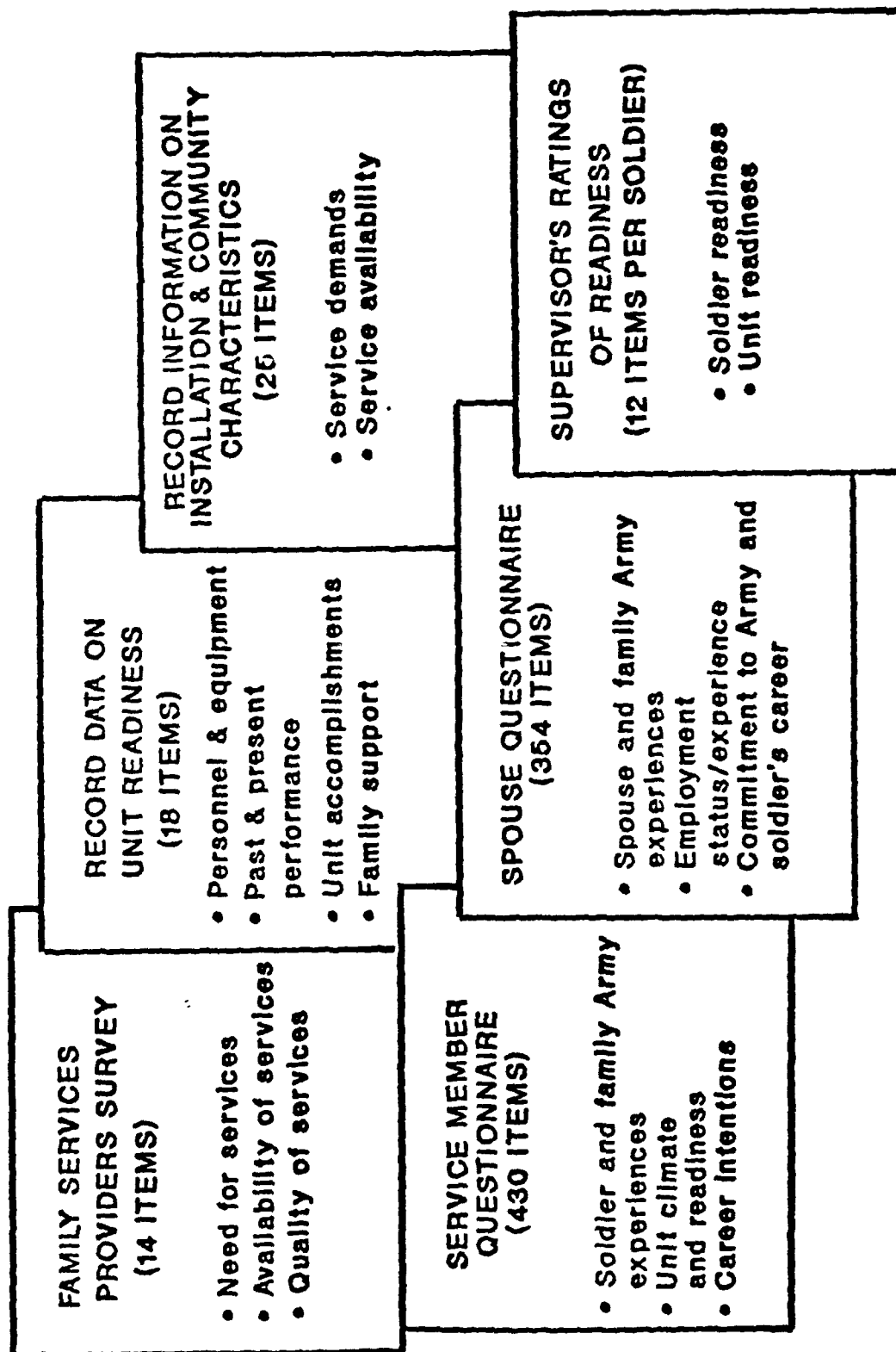


FIGURE C-2

- * Spouse experience, aspirations, Army life and career commitment and other data on the spouses of soldiers in the survey sample: spouse self-report;

- * Couple and family data, descriptive data collected from one or both members of the couple; and data from each member to be used to create couple variables (e.g., agreement or disagreement) on retention plans, couple communication, and couple/family effects of unit leadership practices, based on soldier and spouse self-report.

Unit-Level Data.

Three main types of unit-level data were collected:

- * Unit readiness measured by: (1) unit commander's modified unit status summary report; (2) unit readiness ratings completed by soldiers in the survey sample, by the commander at the next level above the unit, and by supervisors not in the survey sample; and (3) aggregates of individual readiness data for soldiers in the unit.
- * Unit leadership data were obtained from: (1) soldier reports about the work environment, treatment of soldiers by leaders, unit leadership practices, and soldiers' evaluation of leaders' performance and support for soldiers and families; (2) the spouse's reports of the soldier's work demands and their perception of leadership support for families; and (3) supervisors' evaluations of unit leaders' performance.
- * Unit programs and services were measured by data from: (1) reports from the unit commander, and (2) reports from soldiers and their spouses.

Installation-Level Data.

Data were collected from several sources:

- * Installation and community characteristics (location, population, cost of living, and other characteristics) were obtained from: (1) Army records, and (2) the project's installation point of contact.
- * Program availability, quality, and effectiveness were measured by: (1) evaluations of major programs by service providers at the installation, and (2) data from soldiers and spouses on program importance, needs and effectiveness.

These data were linked at the individual/family, unit, and installation level so that the effects of installation, unit, and individual/family factors on individual and family outcomes could be examined and aggregated unit- and installation-level measures could be produced.

APPENDIX D

EXPECTED FY91 & FY92 PRODUCTS

AFRP's 1989 world-wide survey will yield 16 reports covering the five research areas from the CSA's White Paper and Army Family Action Plans (AFRP). The text below provides basic information on each of these FY91 and FY92 products including: (1) the report title, (2) overview of expected contents, (3) intended audience, and (4) projected completion date.

FAMILY DEMOGRAPHY

TITLE: [A-1] Young Single Soldiers

PURPOSE: The purpose of this report is to determine: (1) how well single soldiers perform and cope with Army life, (2) whether having a "serious relationship" effects soldier attitudes towards the Army and Army career, and (3) how fair Army policies and practices are for single soldiers.

APPROACH: Comparisons will be made between single and married soldiers in pay grades E2-E4 and O1-O2. Single soldiers will be further divided according to whether they are dating and the seriousness of that relationship. The analyses will be primarily bivariate in nature (e.g., cross tabulations, averages, and percents). However, more complex analyses will be conducted if appropriate.

POTENTIAL PAYOFF/USER:

* Information on the performance of single and married soldiers can be used by ODCSPER, DA in formulating retention policies. It can also be used by CFSC to better target and justify family and Quality of life (QOL) programs.

* Information on whether girl/boy friends influence retention decisions should be useful to USAREC and ODCSPER, DA.

* Information on the extent to which single soldiers have important personal relationships should be helpful to unit leaders, Chaplains, and family service providers.

* Information on the fair treatment of single soldiers continues to be of interest to the CSA and ODCSPER, DA.

PROJECTED COMPLETION DATE: March, 1991

TITLE: [A-2] Young Soldiers and Family Patterns in the Army: Dual Military, Single Parent, and Soldiers married to Civilians

PURPOSE: The purpose of this report is to determine factors that predict adaptation to Army life among three types of young (E2-E4 and O1-O2) soldiers: soldiers married to civilian spouses, married to military personnel, or who are single parents.

APPROACH: The first step will be to show the characteristics (e.g., gender, rank, and location) which are associated with being in each of these three groups. The second section will identify which variables are associated with Army adaptation in each group. Possible predictors include: specific family assets such as good communication and financial resources, working conditions in the unit, and community support networks and agencies.

POTENTIAL PAYOFF/USER:

* Information on determining what differentiates those in these "high risk groups" who do perform and adjust well within the Army from those who do not should be useful to Army personnel dealing with young soldiers on a daily basis (e.g., unit leaders, Chaplains, and family service providers).

* Information on the which problems are associated with which types of soldiers should be useful to those who train leaders (e.g., TRADOC, USAWC, and USMA) and those who program for family services (e.g., USACFSC & USAHSC).

PROJECTED COMPLETION DATE: February, 1991

INDIVIDUAL & FAMILY ADAPTATION

TITLE: [B-1] Measures of Family Adaptation

PURPOSE: The purpose of this report is to: (1) develop an internally consistent indicator of family adaptation to the demands of Army life; (2) assess the reliability and validity of this measure; and (3) propose alternative indicators that may be appropriate for use with different family population groups, such as civilian spouse families, dual-military families, and single parents.

APPROACH: A preliminary family adaptation construct will be developed by assessing soldier's perceptions of family adaptation, using data from married soldier living with their spouses. This measure will then be cross-validated with the spouse data. Finally, when spouse and soldier data have been integrated, cross-comparison and validation of the preliminary measure of family adaptation will be done.

Pending development of this measure, eight variables are hypothesized to compose this construct. They include: member's perception of family adaptation, spouse satisfaction, spouse support for the Army, and member ability to cope with family demands. Varimax rotated factor analysis will be used to determine the factor loading pattern for these items. Following factor analysis, the resulting family adaptation scale will be statistically assessed for reliability.

POTENTIAL PAYOFF/USER:

* If the factors which differentiate adaptive from non-adaptive families can be easily obtained prior to entry, Army policy makers and recruiters may be better able to screen out high risk candidates before they enter service.

* If the factors are apparent only after the family has entered the service they may be most useful to those involved in early interventions and case identification (e.g., the local ACS office or the soldier's supervisors).

* If the factors point to circumstances which are not easily observed in natural settings, they may be of most interest to those who design policies to avoid family distress (e.g., ODSPER, DA or USACFSC), researchers (ARI, WRAIR, & DMDC), and program evaluators (USACFSC).

PROJECTED COMPLETION DATE: February, 1991

TITLE: [B-2] Individual & Family Adjustment to Relocations

APPROACH: Comparisons will be made between soldiers of varying rank and education and between families with different ages and numbers of children, tenure at current location, and with different waits for permanent housing to determine if separate descriptive models are needed to describe the relocation experiences of different types of families. Analyses will be bivariate (e.g., cross tabulations, averages and percents) and multivariate (e.g., multiple regressions or multivariate analysis of variance).

POTENTIAL PAYOFF/USER:

* Information on what stresses all families during relocation will be useful to policy makers concerned with relocation (e.g., ODCSPER, DA) and to providers of relocation services (e.g., USACFSC and local agencies such as ACS and housing offices).

* Information on the characteristics of families which are most vulnerable to relocation stress will be useful to those involved in case identification (e.g., the ACS) and to those who operate the relocation system (e.g., ODCSPER, DA: USACFSC; and local housing and transportation agencies).

* Information on spouse employment issues will be of greatest interest to ODCSPER, DA and USACFSC and to their local representatives (e.g., the local CPO and ACS).

PROJECTED COMPLETION DATE: April, 1991

TITLE: [B-3] Adjustment to Family Separation

PURPOSE: The purpose of this report is to identify: (1) separation-related problems associated with family adaptation to the Army; (2) aspects of separations that are associated with soldiers' worries; and (3) family characteristics and other family resources that associated with being able to cope successfully with family separation stresses.

APPROACH: Comparisons will be made between soldiers with different levels of social or community support networks available to them. Comparisons will also be made between soldiers enduring separations of various lengths and between soldiers whose unit leaders vary in their supportiveness for families. The analyses will be further divided according to length of marriage, number of children, age of youngest child, dual military status and rank. The analyses will be bivariate (e.g., cross tabulations, average and percents and multivariate (e.g., multiple regressions or multivariate analysis of variance) in nature.

POTENTIAL PAYOFF/USER:

One of the expected consequences of downsizing the Army is that the amount of family separation will increase as a function of the increase in the number of missions each unit will receive.

* Information on the types of difficulties encountered, types of families most likely to experience difficulties, and differences in family coping styles will be useful to agencies that provide services to separated families (e.g., family support groups, unit leaders, ACS, and mental health workers) and to those who train service providers (e.g., CFSC, USAWC, NCO schools, USASMA, and USASSC).

* Information on how much distress is experienced by separations can be used by policy makers to improve the system and by program managers to justify the cost of providing services to these families.

PROJECTED COMPLETION DATE: June, 1991.

SENSE OF COMMUNITY & PARTNERSHIP

TITLE: [C-1] Installation Leadership Practices that Promote Family Support for the Army.

PURPOSE: The purpose of this report is to identify and describe the association between installation-level leaders' attitudes and practices that create supportive environments for families. The report identifies how leader attitudes and unit practices influence family support for the Army.

APPROACH: Researchers interviewed installation-level leaders and installation-level service providers and met with soldiers and their spouses in focus groups. Focus group members completed a short questionnaire and were interviewed. The interviews covered: (1) family morale at the installation; (2) events that may have affected family morale; (3) installation leadership's "best practices"; (4) problems facing families at the installation; and (5) leader support and concern for families. The information collected from the focus groups will be analyzed for prevalent themes. The information will be summarized and reported for each type of respondent: installation leaders, service providers, soldiers, and spouses.

POTENTIAL PAYOFF/USER:

* Identification of practices which families perceive as supportive and helpful will be used by current post leadership and the institutions that train them (e.g., the USAWC and the Center for Creative Leadership).

* Knowledge about supportive family practices should also benefit family service providers and the agencies that train them (e.g., USASSC, ALMC, and USAWC).

PROJECTED COMPLETION DATE: August, 1991.

TITLE: [C-2] Needs for and Access to Army Community Support Programs.

PURPOSE: The purpose of this report is to identify patterns of use and usefulness between the programs available at the installation level, and the soldiers and family members eligible to use the services.

APPROACH: Comparisons on program use and the desirability of having the Army to provide these programs will be made between soldiers with differing among of reported financial, marital, separation, and parental stress. These analyses will be further divided by rank, length of time at location, satisfaction with the Army, and the availability of an automobile. The analyses will be bivariate in nature (e.g., cross tabulations, averages, percents, and correlations). However, more complex analyses will be conducted if appropriate.

POTENTIAL PAYOFF/USER:

* Information on program use and usefulness will assist the USACFSC in promoting, targeting, and defending specific support services.

* Knowledge of the characteristics of program users will be most beneficial to those who operate family programs at the local level and to the agencies that train them (e.g., USACFSC, ALMC, and USAWC).

PROJECTED COMPLETION DATE: May, 1991.

TITLE: [C-3] Unit Demands on Soldiers & families.

PURPOSE: The purpose of this report is to: (1) describe and analyze differences among units in the kinds and levels of demands they place on families; (2) examine unit programs/services/practices that are designed to ameliorate these demands; and (3) examine the extent unit demands on soldiers is directly related to unit mission and readiness requirements.

APPROACH: Units will be classified by type/missions (e.g., combat, combat support, combat service support and TDA), location (e.g., CONUS, USARUER, and other OCONUS) and contingency (rapid deployment) force. The analyses will be bivariate in nature (e.g., cross tabulations, averages, percents, and correlations). However, more complex analyses will be performed if needed.

POTENTIAL PAYOFF/USER:

* Information on how unit missions affect family adjustment will be useful to USACFSC in planning family services as a function of what units do at a particular installation.

* Information on how much family stress is generated by different types of units should also be useful to TRADOC and other agencies involved in training future unit leaders on what to expect in different types of commands.

PROJECTED COMPLETION DATE: March, 1991.

SOLDIER RETENTION

TITLE: [D-1] The Impact of Family & Other Factors on Retention.

PURPOSE: The purpose of this report is to determine: (1) the characteristics of soldiers at different performance levels that are related to retention plans; (2) the comparisons soldiers make between the Army and civilian life which affect stay/leave decisions; (3) soldiers' expectations for work and personal lives, and (4) the social support for the Army career which affects retention decisions.

APPROACH: Comparisons will be made between soldier in pay grades, E2-E9 and O1-O6, and between soldiers of varying performance levels. Soldiers' gender, Army factors (e.g., work demands and programs) and family life factors (e.g., age of children) will be examined at the different performance levels to develop a profile of high-quality soldiers. The analyses will be mostly bivariate in nature (e.g., cross tabulations, averages, percents, and correlations). More complex analyses will be conducted if appropriate.

POTENTIAL PAYOFF/USER:

* Knowledge of the factors that increase retention can be used by ODSCPER,DA to increase the number soldiers retained or to increase the quality of those who are retained.

* Knowledge of the what attracts high performing soldiers to the service and how high performers make retention decisions can be used by the Army in resource allocation decisions to maximize the retention of the soldier the Army most wants to retain.

PROJECTED COMPLETION DATE: February, 1991.

TITLE: [D-2] Retention Decision-Making Process: How Soldiers Make Career Decisions

PURPOSE: The purpose of this report is to determine: (1) the extent to which the couple (as opposed to the soldier) is the relevant decision-making unit for retention decisions; (2) what predicts the degree of spouse participation; (3) whether spouse participation is associated with higher levels of retention, and (4) what influences couples (as opposed to soldiers) to remain in service.

APPROACH: Comparisons will be made between soldiers at different career stages and/or performance levels. These analysis groups will be further subdivided by characteristics of the marriages (e.g., length and level of marital adjustment). The analyses will be mostly bivariate in nature (e.g., cross tabulations, averages, percents, and correlations). However, more complex analyses will be used if needed.

POTENTIAL PAYOFF/USER:

* Knowledge of how couples make retention decisions will help USACFSC, installation commanders, and MACOMs in making resource allocation decisions among family and other Army programs.

* Knowledge of the family decision-making process and its effects on soldier retention can be used by ODSCPER, DA, unit commanders, and reenlistment NCOs)

PROJECTED COMPLETION DATE: March, 1991.

TITLE: [D-3] Preliminary Models of Soldier Retention

PURPOSE: The purpose of this report is to determine: (1) the relative importance of work factors (e.g., pay and benefits) personal/family factors (e.g., marital status and spouse satisfaction) , and community factors (e.g., family programs and services) in explaining retention intentions; and (2) whether the relative importance of work, personal/family and community factors differ for high- and low-performing soldiers.

APPROACH: Comparisons will be made between single and married, male and female soldiers, junior enlisted (E2-E4), junior NCO (E5-E6), and company grade officers (O1-O3), and between high, medium, and low performers. Preliminary analyses will include cross-tabulations, averages and percents. Further analyses will be multivariage regressions to predict soldier performance and retention levels.

POTENTIAL PAYOFF/USER:

* Information from this model will be useful to Army policy makers in designing a comprehensive package of retention policies that will be attractive to the types of soldiers the army most want to keep.

* Information on the factors within Army control will be useful to those who must implement the policies and programs that encourage retention among the best soldiers.

PROJECTED COMPLETION DATE: September, 1991.

INDIVIDUAL AND UNIT READINESS

TITLE: [E-1] Measures of Individual Readiness.

PURPOSE: The purpose of this report is to develop: (1) a set of readiness measures which would have maximum comprehensiveness, reliability, ease of data collection, and be acceptable to the Army; (2) measures that will be affected by family-related factors and practices; (3) instruments and materials which would allow these measures to efficiently diagnose current problems at the individual level; and (4) norms for the measures based on the survey sample.

APPROACH: An initial literature review was conducted to identify readiness dimensions. An initial list of individual readiness dimensions was constructed based on this literature review.

Two sets of workshops refined the list of dimensions. The first series of workshops used a critical incidence methodology in which officers and NCOs from combat and support units generated critical behavioral incidents based upon their experience in the Army. Draft scales were constructed for each dimension. In the second workshop NCO and officers refined the dimensions to produce measures for officer, NCO and junior enlisted personnel.

Draft instruments were then developed and field tested. Following an analysis of the field tests, the readiness instruments were reviewed and approved by USACFSC; ODSCPER,DA; and DCSOPS,DA. A single set of weights that could be used to combine the individual readiness measures for junior enlisted personnel, NCO, and officers were derived.

POTENTIAL PAYOFF/USER:

* Measures of individual readiness can be used in research by ARI, WRAIR, and DMDC. It can also be used in program evaluation by such agencies as ODSPER,DA and USACFSC.

* If found to be "user friendly," the readiness measure can be used in USAPIC surveys to test trends.

* A good measure of individual readiness that is high in "user friendliness" could be used by local commanders and personnel specialists making retention decisions in a downsizing environment.

PROJECTED COMPLETION DATE: March, 1991.

TITLE: [E-2] Measures of Unit Measures.

PURPOSE: The purpose of this report is to develop: (1) a set of readiness measures which would have maximum comprehensiveness, reliability, ease of data collection, and acceptability to the Army; (2) measures that will be affected by family-related factors and practices; (3) instruments and materials which would allow these measures to efficiently diagnose current problems at the unit level; and (4) norms for the measures based on the units sampled.

APPROACH: An initial literature review was conducted to identify readiness dimensions. An initial list of individual readiness dimensions was constructed based on this literature review.

Two sets of workshops were then conducted to further refine the list of dimensions. The first series of workshops used a critical incidence methodology in which officers and NCOs from combat and support units generated critical behavioral incidents based upon their experience in the Army. Draft scales were constructed for each dimension. In the second workshop NCO and officers refined the dimensions to produce the best overall measures of unit readiness.

Draft instruments were then developed and field tested. Following an analysis of the field tests results, the readiness instruments were reviewed and approved by USACFSC; ODSPER, DA: and DCSOPS, DA. A single set of weights that could be used to combine the unit readiness measures were derived.

POTENTIAL PAYOFF/USER:

The users will depend, in large part, on the success achieved in creating a user friendly unit readiness measure.

* Measures of unit readiness can be used in research by ARI, WRAIR, and DMDC. It can also be used in program evaluation by such agencies as ODSPER, DA and USACFSC.

* A good, "user friendly" measure of unit readiness could be used in USAPIC and ODCSOP, DA to test trends and by field commanders to determine success in training and as a way of focusing on where additional effort is needed.

PROJECTED COMPLETION DATE: March, 1991.

TITLE: [E-3] The Relationship of Family & Army Factors to Individual Readiness.

PURPOSE: The purpose of this report is to determine: (1) how family-related actions of unit leaders and supervisors affect soldier readiness; (2) what family oriented policies, programs, and activities of unit leaders and supervisors enhance the effectiveness of their soldiers; and (3) whether family-related actions of unit leaders and superiors should vary by the types of soldiers involved.

APPROACH: Using factors which provide information on demographics, attitudes, MOS, reasons for enlistment, commitment to and satisfaction with the Army, family characteristics and family support for the soldier, a multivariate model will be tested using regression equations that focus on the relationship between unit readers and supervisors family-related actions and soldiers' readiness.

POTENTIAL PAYOFF/USER:

* Information demonstrating a relationship between the family policies, programs and activities of supervisors and individual soldier performance/readiness will be useful to USACFSC and ODCSPER in increasing Army emphasis on family-related issues.

* If leader/supervisor actions increase individual soldier performance/readiness, this information will be useful to unit leaders and those who training them (e.g., TRADOC, C&GSC, USMA, USAWC, and the USASMA).

* If a relationship between unit practices and readiness is identified, this information could also be used by USAPIC, MILPOs and assignment officers to assign leaders and soldiers to units.

PROJECTED COMPLETION DATE: March, 1991.

TITLE: [E-4] The Relationship of Family & Army Factors to Unit Readiness.

PURPOSE: The purpose of this report is to determine which leader and supervisor policies, programs and activities for families most affect: (1) unit readiness and (2) family commitment to the Army. The report will also explore whether these relationships are different for different types of units.

APPROACH: The following kinds of data will be used as input into a multivariate model: information on demographics, aptitudes, MOS, reasons for enlistment, commitment to and satisfaction with the Army, family characteristics and family support for the soldier. The model, in turn, will be tested using regression equations to determine the relationship between unit leader's (and supervisor's) family related actions and measures of unit readiness.

POTENTIAL PAYOFF/USER:

* If certain family related activities at the unit level are found to benefit both the unit and the families, this information can be used by TRADOC and other leader trainers (e.g., USMA) to ensure that implementation of those practices increase. This same information can be used by CFSC ODCSOPS, DA and MACOMs to increase resources for those successful activities.

* If unit readiness is related to objective characteristics of individual soldiers and their families, this information can be used by ODCSPER, DA and USAREC to formulate recruiting policy, and by TRADOC and others to train leaders, or by those who manage the assignment of soldiers to units (e.g., USAPIC; MILPOs, and local assignment officers).

PROJECTED COMPLETION DATE: June, 1991.

TITLE: [E-5] Models of Individual & Unit Readiness.

PURPOSE: The purpose of this report is to determine: (1) the key factors that affect individual and unit readiness either directly or indirectly; (2) the relative influence of key factors on readiness; and (3) what the Army leadership and unit commanders can do to positively affect the readiness of units and soldiers.

APPROACH: Using information and constructs derived from earlier studies on individual and unit readiness, multivariate analyses will be used to test models relating individual and unit readiness to soldier adaptation and satisfaction with the Army.

The description of this modeling effort will detail the results of the tests used to ascertain whether common sets of variables and a common model could be used in all situations or whether separate models will be required for different types individuals, unit, locations, etc.

POTENTIAL PAYOFF/USER:

* Models which incorporate key factors which affect readiness can be useful to unit commanders to maintain unit readiness during downsizing. In addition, the report will be useful to ODCSPER,DA; ODCSOPS,DA; and TRADOC offices that are concerned with doctrine and policy.

* Models which incorporate family and demographic factors affecting readiness should help both those who provide family services (e.g., family support groups, unit leaders, ACS, and mental health workers) and those who train them.

* Information on how readiness is affected in different types of units could be used by TRADOC and other agencies that train future leaders.

PROJECTED COMPLETION DATE: September, 1991.